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ABSTRACT

This publication resulted from a forum entitled "Support for Environmental Education: Where Do We Go From Here?" which was sponsored by the Conservation Foundation as a part of its continuing series of environment forums initiated in 1970 to provide leaders of diverse citizen and professional organizations the opportunity to obtain authoritative information and to explore alternative solutions to environmental problems. The transcript of the March 2, 1973 forum was prepared and supplemented by materials relating to the Office of Environmental Education (included as appendices to the transcript). Within the transcript the professional affiliation of each of the participants is provided so that readers may have an additional perspective of the individual's contribution. Material contained in the appendices consists of (1) Environmental Education from the Field: Two Surveys by Friends of the Earth, (2) information concerning the fiscal year 1973 grantees of the Office of Environmental Education, (3) a brief chronology of the Environmental Education Act, (4) the Environmental Education Act of 1970, and (5) Recommendations of the Advisory Council on Environmental Education in its Second Annual Report, March 1973. (PEB)

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ENVIRONMENT FORUM

SUPPORT FOR ENVIRONMENTAL EDUCATION:

WHERE DO WE GO FROM HERE?

Conservation Foundation
1717 Massachusetts Avenue, NW
Washington, D.C. 20036

Price: $2.00

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INTRODUCTION

When the Environmental Education Act (P.L. 91-516) was passed in October 1970, it was hailed by environmentalists as a landmark piece of legislation and by U.S. Commissioner of Education Sidney P. Marland, Jr., as "the education that cannot wait." The Act was intended to support the development and dissemination of environmental curricula, the training of teachers, and the conducting of courses and symposia both within and outside the formal school system. Serving as a catalyst within the Office of Education, the Act was also intended to encourage the expenditure of an additional several million dollars by other Office of Education program authorities.

During fiscal 1971, 1972, and 1973, the Office of Environmental Education awarded 290 grants totalling $5,867,225. The catalytic role -- or "synergy" effect, as it was labeled -- was fraught with misunderstanding. The following excerpt from a recent report of the House Committee on Education and Labor suggests some of the problems:

> The Committee, in light of the 18-month delay involved in producing this so-called 'synergy' list, as well as the changing contents of the listing, and the doubtful nature of many of the projects included, is not satisfied that the Office of Education did, in fact, spend over $11 million in 1973, under other legislative authorities, on environmental education.
>
> The Committee, however, wishes to make clear its support for any genuine activities for environmental education, as defined in the Act, which appear to have been supported under other authorities, and applauds the Office of Education in this regard.
>
> Indeed, the Committee would urge the Office of Education, where possible, to fund environmental education activities under other authorities so as to complement the

small amount of funds available under the Act for environmental education.*

The original Act was due to expire in June, 1973. However, under the General Education Provisions Act, P.L. 91-516 was automatically extended for one year, thus allowing the Office of Environmental Education to continue through the current fiscal year. Despite the extended program authorization funds must be authorized and appropriated to support the Office.

In February, 1973, a bill (H.R. 3927) was introduced in the House of Representatives to extend the Environmental Education Act for three years with authorizations for funding of $60 million over that period (the authorization was later amended to $45 million). Hearings on the bill were held by the House Select Subcommittee on Education in April. At the same time, a Senate bill (S. 1647) was introduced to extend the Environmental Education Act for three years. As of this writing, the bills have not come to a vote, although the House Committee on Education and Labor has, with minor amendments, reported favorably on the bill.

The legislation presents an interesting study in political science. While the original Act carried authorizations of $45 million, less than $6 million was actually made available for grants. In addition to the original hearings conducted by the appropriate House and Senate Committees in 1970, oversight hearings were held in 1971 and 1972. Thus, there has been no lack of public or professional interest in the federal role in environmental education.

On March 2, 1973, in anticipation of the need to consider the possible expiration of the Act and the support of environmental education in the future, the Conservation Foundation conducted a forum entitled "Support for Environmental Education: Where Do We Go From Here?". The meeting was part of the Foundation's continuing series of Environment Forums, which were initiated in 1970 to provide leaders of diverse citizen and professional organizations the opportunity to obtain authoritative information and to explore alternative solutions to environmental problems.

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* "Extending the Environmental Education Act," p. 11, House of Representatives Report No. 93-402, July 26, 1973.

The Forum on environmental education was of considerable interest beyond the conference room where it was held. For that reason we have prepared the following transcript of the meeting. In order to make this document more useful to those concerned with environmental education, we delayed publication of the report until we could supplement it with materials relating to the Office of Environmental Education. These are included as appendices to the transcript. We trust that you will find this information useful, and we welcome comments from you on how this fits your needs.

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TRANSCRIPT OF THE ENVIRONMENT FORUM

ON

"SUPPORT FOR ENVIRONMENTAL EDUCATION: WHERE DO WE GO FROM HERE?"

SYDNEY HOWE, President of the Conservation Foundation: First, I want to welcome everybody to this Forum on environmental education, particularly those who I know have made this special effort to come from out of town to discuss this very important subject. I hope it's very useful to you to have done so. Secondly, let me say that I trust that everybody knows that the Conservation Foundation does not lobby. However, our environment forums are conducted for the purpose of open display and discussion and debate about controversial issues that may well entail legislation. What you as individuals or groupings of individuals want to decide to do following, or on the basis of, understandings or ideas developed in one of these forums is your show. We do not attempt here, however, to develop consensus and get people voting on things at all. We simply want to continue the best possible presentation and exchanges of information, ideas, and opinions.

I had a telephone call at home last night from Walter Bogan regretting very, very much that it's not possible for him to come today. He has proposal review out at Harper's Ferry that is very difficult for him to disrupt as he had once thought he could to be here. There will be a statement, I understand, on the behalf of Walter, however. With that I turn you to Jim Aldrich, who's going to moderate.

JAMES ALDRICH, Conservation Foundation: Thank you. We have one other casualty today, and that is Dale Jenkins, who was going to come as a reactor. He has just come back from a tour of Southeast Asia and one of the souvenirs was the Asian flu. So, he's sort of out of it for today.

I'd like to point out, as we did in the letter, that we are taping the session. These microphones are not for decoration. There's a tape machine underneath, and the reason we're doing that is that we have in mind possible publication of the proceedings.

One thing that I would like to point out is that everybody is here as a discussant -- and what we hope for is a general discussion among everybody. The panelists and reactors have been kind enough to make some effort to make their presentation to the group, but only to get us started into some active discussion. We look on everybody here as a participant in a forum, not as an observer or as a viewer of somebody else participating.

JOHN BRADEMAS, U.S. House of Representatives, South Bend, Indiana: First of all, Mr. Chairman and Ladies and Gentlemen, let me say how very pleased I am to welcome you to Washington for the purpose of discussing where we are right now in environmental education, and where we ought to be going. I want particularly to commend the Conservation Foundation for having sponsored this forum. I hope, also, you will forgive me for having to leave immediately after I've said what I have to say, since I have a number of people who are here in Washington to talk to me about some other matters. I make that caveat because some of what I have to say will not be very agreeable to all of you, and I always hate to hit and run, but there'll be other opportunities for those who are critical of my observations to have at me since, in spite of the fact that some may regard members of Congress as an endangered species, I think that some of us are going to be around for a while.

Most of you are among the nation's leading experts on the environment and are familiar with the fundamental reasons why a group of us in Congress -- both Democrats and Republicans -- in 1970 initiated the legislation which subsequently became the Environmental Education Act. Disturbed as we were about the deterioration of our environment, we came to the conclusion that a major cause of this deterioration was that too many of our citizens did not have an adequate understanding of our environment and the need to protect and improve its quality. We found, however, that the resources available for educating our young people and informing our citizens about the environment were seriously deficient. We decided, therefore, to lend our support to a thoughtful and reasoned effort to encourage environmental education in the schools of our country as well as at the community level.

We define the term "environmental education" in the legislation in the following words: "the educational process dealing with man's relationship with his natural and manmade surroundings including the relation of population, pollution, resource allocation and depletion, conservation, transportation, technology, and urban and rural planning to the total human environment." Now we all know that despite the widespread support for this legislation from both Democrats and Republicans in Congress (I'm very glad to see a representative of Senator Nelson here, because he was the principal Senate sponsor of this legislation), the Nixon Administration testified before Congress, before my Subcommittee indeed, in opposition to the enactment of the bill. But, you know too, that Congress gave overwhelming approval to the Environmental Education Act. The House passed the measure by 289-29 and the Senate approved it by a vote of 64-0. You know also that once the legislation was enacted the Administration opposed adequate appropriations for it.

There may well have been some hope for redemption with respect to the Administration when one read the words of President Nixon in his August 1971 message transmitting to Congress the first annual report of his Council on Environmental Quality. For in that report, the President called for what he described as environmental literacy, and went on to say: "This will require the development and teaching of environmental concepts at every point in the educational process." I am sure that many of you will remember the celebrated article of the then U.S. Commissioner of Education -- Sidney Marland, Jr. -- in the May 1971 issue of the Office of Education journal American Education entitled "Environmental Education Cannot Wait."

But then you will recall that the Administration embarked upon its course of systematically seeking to cripple and kill the legislation which had won such broad support in Congress and the country. The law mandated the establishment of an Office of Environmental Education. But one full year after the President signed the measure into law, which was in October 1970, no such office has been created. You will recall that the law mandated the establishment of an Advisory Council on Environmental Education and assigned the members of that Council significant and substantive duties. A full year after the enactment of the statute, no Council had been appointed. A full nine months after the Act became law went by before a director of the office was named. And while Commissioner Marland proudly told us in Congress that he had personally -- think of it --

personally participated in a nationwide search for a top flight person to carry out this difficult assignment, by the time our Select Education Subcommittee had conducted its second round of oversight hearings on the legislation in April 1972, Dr. Gilkey had been fired. And according to Commissioner Marland, it turned out that Dr. Gilkey somehow did not have the proper qualifications after all. As you know, at our first oversight hearings on the first anniversary of the Act, Commissioner Marland announced the appointment of the Advisory Council, and said that it would first meet in December 1971, some 14 months after the statute had become law. But at the April 1972 oversight hearings, the Chairman of the Advisory Council told our Subcommittee that the Council had not been involved, as the law required, helping the Office of Education prepare regulations for operating the programs under the Act. She said that the Council had not been involved as the law required in making recommendations on the allocation of funds under the Act nor in making recommendations on the criteria to be used in approving applications.

Now, the refusal by the Department of Health, Education and Welfare to obey the law by appointing the Advisory Council required by the statute is not an isolated incident under this Administration. Some of you may also know that I happen to be the chief sponsor in Congress of the bill authorizing the National Institute of Education (NIE), which was proposed by President Nixon in March 1970, and which I believed when the President proposed it, and I believe still, to be an outstanding and commendable initiative on the President's part. But in the legislation authorizing the National Institute of Education, Congress mandated that there be established a National Council on Educational Research which was not advisory in nature, but which is required under the statute to give policy direction to the work of the Institute. Many months have now gone by since the President signed this legislation into law. And although the Director of the NIE has been finally appointed, no Council has as yet been appointed as we meet here in March 1973.

We had hearings before my Subcommittee of an oversight nature last month and were again given a promise by Commissioner Marland that the hour would not be long when we could expect the appointment of this Council. So the Director of the National Institute of Education continues to make policy, for he is spending money; and in fact in his testimony he acknowledged in response to my inquiries that he was indeed making policy in direct violation of the intent of Congress. Thereby, the Administration, with respect to

its own initiative -- not an initiative like the Environmental Education Act which was ours in Congress, but with respect to its own initiative -- is deliberately undermining the intent of Congress and is eroding the very painfully constructed bi-partison support which was put together for that legislation. Indeed, we've come to the pass where one group not to the Administration's liking is even threatening to bring an injunction against the Director of the National Institute of Education for violating the statutory mandate of Congress that there be created a National Council on Educational Research which has the power, and it's a mandatory power, I reiterate, to set policy for the Institute. It's really rather an extraordinary situation that we find in an Administration which likes to talk so much about law and order.

The proposals of the Administration contained in the fiscal 1974 budget with respect to the funding of the several student assistance programs in higher education reflect another instance of the willful contempt of Congress by the leaders of this Administration. Those of you who are higher educators may be aware that last year -- and I happen to be a co-sponsor of that legislation, too -- Congress wrote into law a brand new program of student assistance called "Basic Educational Opportunity Grants" championed by my colleague in the Senate, Senator Pell of Rhode Island. But we provided by way of statutory mandate that the BOG's may not be funded until the existing college work study program and national defense student loan program are funded at a certain level, and if you look at the President's fiscal 1974 budget you will find no money at all budgeted for NDSL's and college work study. It is really an astonishing kind of posture that the Executive Branch takes toward the law of the land. Therefore the attitude which Commissioner Marland and his associates brought to the implementation of the Environmental Education Act was only one of the earliest indications of what has proved to be a continuing pattern.

When we look at what the Office of Education did with the modest funds that Congress appropriated for the Environmental Education Act, we see still further evidence of the systematic efforts to destroy this program. Congress provided $2 million in a supplemental appropriation for fiscal 1971, and when the word went out on applications for Environmental Education money, nearly 2,000 were sent in totalling, I am told, some $70 million in requests for funds, all of which came in within a few days. The Office of Education, however, allocated but $1.7 million of the $2 million appropriated and used the money for a total of 74 grants, less than 4% of the number of proposals received. Of these 74, nearly half were minigrants or less and only nine of the other half went to State or local educational agencies. I mention this

fact because the principal purpose of our bill, as anyone who could read the English language could have understood, was to support environmental education at the elementary and high school levels.

The following year, Congress provided $3.5 million for the program, but OE programmed for only $3.18 million. In both years the Office of Education explained that it was using the balance of the money for administrative purposes such as salaries, although such funds are customarily requested in separate categories. Then OE added a new twist by fiscal 1972 called synergistic funding. They told us in Congress in effect that we shall use the money allocated us to simulate the use of environmental education in other ongoing programs supported by the Office of Education.

Let me just summarize. I think that I have already made it clear that in my judgement the Nixon Administration has been engaged in systematically and deliberately undercutting this bi-partisan legislation which has been so enthusiastically received throughout the country. And may I make very clear, by the way, that I am not including in my criticism Walter Bogan, who I think came in good conscience and has been trying to do a good job. The Administration has clearly not been using the money for the chief purpose we intended, i.e., to provide encouragement for elementary and high school environmental education.

Now I suppose my reciting to all of you this dreary litany of facts is not really necessary because you have at this Forum outstanding authorities in environmental education from all over the country, including two of the ablest members of the National Advisory Council -- both of whom found it necessary to submit their resignations in January. I refer, of course, to Ed Weidner [who was not present] and to Dick Myshak -- two of the most respected authorities in the world in the field of environmental education. I invite you only to read their letters of late January to Secretary Weinberger and you will see far more trenchant criticism than even I have voiced of the implementation of this program by the Administration.

My mind goes back to the oversight hearings of October 28, 1971, when one of the witnesses told our Subcommittee: "I would like to make it clear that there's no higher program in the hierarchy of program rank in the Office of Education than Environmental Education. This program is housed in the Office of Development directly under the administration of the Deputy Director of Development which is much higher in the structural order than Title I, Higher Education student aid or bilingual education. As important as these issues are,

there are none higher than Environmental Education in terms of access to the Commissioner in the rank order of the agency." You all recall, of course, who made that moving tribute to the importance of environmental education. It was the author of the celebrated article, "Environmental Education Cannot Wait," the present distinguished Assistant Secretary of Health, Education and Welfare for Education and the author of those moving letters to the editor of the New York Times about the deep commitment of the Nixon Administration to the support of education at every level -- Sidney Marland, Jr. My mind at times like these always goes back to the words of another great champion of this Administration -- John Mitchell -- who urged us all in the early days of the Administration not to watch what we say but what we do. A lot of us in this town have been doing so and are finding ourselves depressed on both counts. So where are we now? Well, I for one certainly do not intend to roll over and play dead with respect to this legislation or indeed with respect to any other important measures which the elected representatives to the Congress of the United States have determined are sound and in the best interest of the American people. It is for this reason that last month I introduced a bill that would extend the Environmental Education Act for another three years and increase funding to $60 million over that period. I am glad to tell you that even as the original legislation was supported by both Democrats and Republicans in Congress, this bill too is co-sponsored by my Democratic colleague Congresswoman Patsy Mink of Hawaii and my Republican colleagues Congressmen Peter Peyser of New York and Orval Hansen of Idaho. It is my intention to have our Subcommittee hold hearings on this bill in the near future to allow those who wish to do so to testify on the legislation.

I must say, however, that we are going to need your help in this effort and the help of people like you who share with Democrats and Republicans in Congress a commitment to the shaping of sound and intelligent policies for the environment of which we are a part. To achieve this objective we must have an educated and informed citizenry, and that is why I am confident that the 93rd Congress will extend the Environmental Education Act. Thank you very much.

JAMES ALDRICH, Conservation Foundation: Thank you very much for coming. We'll move on to the next presentation. We had prepared brief biographical sketches of each of our presenters, but since Miss Lee has come along to substitute for Walter Bogan, we weren't prepared. I do know that she is an Attorney here in Washington dealing in environmental law. I do know she served as staff counselor for the Citizens' Advisory Committee on Environmental Quality, and has also served as general counselor to the Inter-American Social Development Institute. She is presently a member of the Advisory Council on Environmental Education. She is amply qualified to come in and present Walter Bogan's comments to us.

LINDA LEE, National Advisory Council for Environmental Education: Thank you, Jim. I have copies of Walter's statement which I will read. As Syd indicated in his opening remarks, Walter very much regrets that he could not participate today as he had planned. He enthusiastically supported the idea of the Forum that the Foundation is sponsoring. But a deadline change affecting when the 1973 program money must be announced for grants under the program has forced him to move his entire professional staff as well as some outside readers outside of Washington to begin a month-long review of some 1500 to 1600 proposals to fit into what is expected to be a $3.18 million program for the current fiscal year. It may seem odd for a member of the Advisory Council, a Council which has been critical, as the Congressman indicated, of some of the operations of the program, to represent Mr. Bogan on this occasion, but our goals are the same despite some differences on perspective. Any comments I make other than quoting from Walter's statement are my own as a member of the Council and not attributable to Mr. Bogan or anyone else. With that caveat, I will briefly go through the statement that he prepared and then distribute copies for you. Any questions that you may have, he will be pleased to respond to in writing and he will have the transcript of the Forum available.

[The following is Ms. Lee's presentation of Walter Bogan's statement.]

> The building of a better environment will require in the long term a citizenry that is both deeply concerned and fully informed. Thus, I believe that our education system, at all levels, has a critical role to play.
>
> -- President Nixon

BACKGROUND

The last few years have seen widespread recognition of the critical role environmental education must play in the nation's educational life if environmental quality is to be effectively pursued. President Nixon has emphasized that role on several occasions; in his introduction to the first annual report of the Council on Environmental Quality, in August 1970, he stated,

> The basic causes of our environmental troubles are deeply embedded. . .It should be obvious that we cannot correct such deep-rooted causes overnight. . .We must seek nothing less than a basic reform in the way society looks at problems and makes decisions. Our educational system has a key role to play in bringing about this reform. It is also vital that our entire society develop a new understanding and a new awareness of man's relation to his environment -- what might be called 'environmental literacy.' This will require the development and teaching of environmental concepts at every point in the education process.

Not long afterward, in October 1970, the President signed into law the Environmental Education Act, which is intended to address the environmental education needs of all citizens.

Under authority of the Act, the Environmental Education Program (EEP) was established in December 1970 within the Office of Priority Management. Seven staff positions were allotted for EEP, five professionals and two clerical. The staff was housed in temporary quarters in the regional office located in the Government Services Administration Building.

In October 1971 EEP became the Office of Environmental Education (OEE) and was located under the Deputy Commissioner for Development. The staff allocation of seven remained firm for fiscal 1972, with plans to increase that staff in fiscal 1973 to thirteen. Because of periodic manpower freezes, uncertainties of budget, and the recent decision to exclude the grants program from the fiscal 1974 budget, the plan to enlarge the staff could not be implemented and the actual number of staff members on board during fiscal 1973 has been six.

In October 1971 the National Advisory Council for Environmental Education was also formed; it held an initial meeting in December 1971 and has subsequently met in various locations around the country in full or subcommittee sessions.

FUNCTIONS AND ACTIVITIES

Grants Program

In fiscal 1971 $2 million was appropriated through a supplementary bill under the authority of the Act and designated for grants and administrative costs. Around 2000 proposals were received and evaluated, and 74 were selected for funding. (See Tables I and II.)

In fiscal 1972, $3.514 million was appropriated to the Office for grants and administrative costs. Close to $3 million of this was awarded to 162 projects in every state, the District of Columbia, the Marianas Islands, and Puerto Rico. (See Tables I and III.)

TABLE I: FISCAL YEAR 1972 ENVIRONMENTAL EDUCATION AWARDS, BY CATEGORY, AS COMPARED TO FISCAL YEAR 1971 AWARDS

CATEGORIES	1972 E.E. Awards # of Awards	1971 E.E. Awards # of Awards
Type A: Workshops	33	36
Type B: Statewide Evaluation and Dissemination	11	5
Type C: Pilot Projects		
Personnel Training		
(A) Inservice Education Personnel	4	1
(B) Inservice Noneducational Personnel	4	1
(C) Preservice Educational Personnel	1	-
(D) Perservice Noneducational Personnel	1	1
(E) Government Personnel	1	1
TOTAL Personnel Training	11	4
Community Awareness		
(F) School-Community Models	1	1
(G) Environmental Education Centers	14	6
(H) Citizen Participation Projects	10	11
TOTAL Community Awareness	25	18
Instruction and Curriculum		
(I) Elementary & Secondary Programs	7	1
(J) Supplementary Materials	18	1
(K) Curriculum Development	38	8
including Media Projects (K_2)	3	
TOTAL Instruction and Curriculum	66	10
Evaluation and Dissemination		
(L) General Evaluation	2	1
(M) Dissemination: Information Dissemination	12	0
(N) Dissemination: Information Clearinghouse	3	0
TOTAL Evaluation and Dissemination	16	1
GRAND TOTAL	162	74

TABLE II: FISCAL YEAR 1971 ENVIRONMENTAL EDUCATION AWARDS, BY TYPE OF ORGANIZATION FUNDED

Type of Organization	Large Grants Funded	Amount of Grant	Small Grants Funded	Amount of Grant
Universities, four-year colleges, and community colleges	14	$363,036	5	$37,900
Local and state education agencies	6	365,000	3	26,200
Community education programs	2	87,000	4	37,750
Private environmental organizations	3	99,000	8	71,100
Private educational organizations	6	271,400	2	17,487
Other private organizations	2	65,000	8	67,660
Public agenices	3	103,554	5	36,521
Museums	1	19,000	---	---
Libraries	1	50,000	1	4,869
TOTAL	38	$1,422,990	36	$299,487

TABLE III: FISCAL YEAR 1972 ENVIRONMENTAL EDUCATION AWARDS, BY TYPE OF ORGANIZATION FUNDED

Type of Organization	# of Awards	$ Funded
Institutes of Higher Education	34	$ 599,900
Private/Other	29	497,450
Local Education Agencies	29	486,000
Private Educational Organizations	11	381,750
Private Environmental Organizations	26	376,850
Public Agencies and Organizations	7	194,940
State Education Agencies	6	176,950
Museums	4	111,800
Community Colleges/Vocational Education Schools	9	87,300
Private Elementary and Secondary Schools	4	56,600
Public Libraries	3	29,500
TOTAL	162	$2,999,040

For fiscal 1973, it is expected that $3.180 million in grants will be awarded for an estimated 175 grant projects. The nationwide developments in environmental education that took place in the previous two years and the knowledge of national environmental education activities gained by the Office over this time makes it possible for the Office to grant funds to those programs that most clearly promise to advance the art of environmental education and to fill the most urgent needs.

One of the most important objectives of OEE's funding activities is to attract longer-term and more substantial financial assistance from all sources, private and governmental, to local project sites. In the two years of the program's existence, funding from other sources has increased. In fiscal 1971, approximately $3 million from other OE programs, including the Elementary and Secondary Education Act, the Education Professions Development Act, and the Cooperative Research Act, were provided for environmental education projects. For fiscal 1972 a descriptive list of projects totaling over $11 million in funds, together with evaluations of their potential contributions, was submitted to the Commissioner of Education. This list, or portions of it, will be announced when the Commissioner has approved it for dissemination.

Technical Assistance

Technical assistance requests have far exceeded our ability to respond. Nonetheless, considerable attention has been given to this part of our strategy. Nonmonetary assistance has been provided to numerous federal, state, and local agencies and to private organizations during the past two years, including:

1. Assistance in the design of specific environmental awareness projects planned by the Environmental Protection Agency, the Army Corps of Engineers, the National Park Service, and Action.

2. Co-sponsorship of interagency training sessions involving personnel from sixty operating units of the federal government. These sessions were held in order to exchange information, materials, and ideas concerning environmental education development throughout the government and the country.

3. Provision of contract funds for development of a training program in integrated pest management and control. This activity was carried out under the joint sponsorship of the Council on Environmental Quality, the Department of Labor, the Environmental Protection Agency, and the Office of Education.

4. Co-sponsorship with the Environmental Protection Agency of the President's Merit Award Program.

5. Participation in preparations for the United Nations Conference on the Human Environment, held in Stockholm in June, 1972.

6. On-site consultation to numerous projects throughout the country, many of which were funded under auspices other than the Environmental Education Act.

7. Environmental education training sessions for regional office personnel, primarily within HEW, are being conducted at the present time. These regional office training sessions are also attended by personnel from other federal agencies, state agencies, and private organizations located in the region. From the experiences gained from the training activities conducted thus far, OEE is completing the design of a prototype training program process that can be used for training activities in other regions of the country.

Program Development

Evaluation. During the past two years, grantees have been asked to evaluate their projects and to include their findings in their final report. In addition, most of the projects funded under the Act in fiscal 1971 and fiscal 1972 have or will be visited by OE personnel or outside experts engaged by OE.

In addition, OEE has almost completed the design of a three-year evaluation strategy. The first phase of that strategy will be implemented within the next few months, and consists of the following activities:

1. Preparation of a working paper on the definition of environmental education, based on our present concepts as reflected in the Handbook and on the ideas and experiences of outside experts.

2. Preparation of a self-evaluation questionnaire, to be given to all programs funded in fiscal 1972 and fiscal 1973.

3. Support of a national conference on state planning in late April. The conference objective is to create a working document concerning evaluation of state planning activities in environmental education. This document will be used in the planning of future state programs.

We plan to utilize the results of the first phase activities as a foundation for more in-depth and comprehensive evaluation activities at some later time. Such later activities would include utilization of completed surveys carried out by the Educational Resources Center and Ohio State University and by the National Center for Educational Statistics to formulate study designs that would address the validity, effectiveness, and feasibility of selected environmental education objectives and approaches; a revised self-evaluation questionnaire; in-depth and formal evaluation of selected projects funded under the Environmental Education Act and other sources; and an assessment of the state of the art of environmental education. The results of these various evaluation activities would enhance dissemination and technical assistance efforts, as well as related program development activities.

Information Dissemination. The following are highlights of OEE's continuing dissemination activities:

Publications. A wide variety of materials have been published or distributed by OEE. Published materials include:

1. The New Environmental Education Program of the U.S. Office of Education (booklet)

2. Education That Cannot Wait (booklet)

3. Environmental Education Handbook (draft version)

4. The Case for Environmental Education (article)

5. (Assorted bibliographies on various environmental education topics)

Materials distributed by OEE include:

1. "Earth Day" Year Around by Judith Serrin (article)

2. Environmental Encounters by Victor Schlich (article)

3. Environmental Education Cannot Wait by S.P. Marland, Jr. (article)

4. Manpower Training Goes to College by Guy P. Million (article)

5. Environmental Education (from the first annual report to the President and the Council on Environmental Quality from the Citizens' Advisory Committee on Environmental Quality October 1970)

6. Aids to Environmental Education, Grades 7-9 (booklet)

7. Pass It On (brochure of the President's Environmental Merit Awards Program)

8. The Environmental Problem (book)

9. Ecological Drums Along the Cuyahoga (article)

Speeches and Articles. Members of my staff and I have delivered numerous speeches and appeared on many panels at meetings and conferences around the country; this sort of information dissemination has been actively pursued since the formation of the program. Articles, written by OE and OEE personnel or by reporters, have appeared in several journals and magazines over the last two years and have helped explain the program and its progress to the public.

Dissemination Program Design. We have just completed the design of a program for expanding and regularizing dissemination activities; program implementation could begin in fiscal 1974. The program includes two-way information feedback and exchange between and among local, state, regional, national, and federal organizations and agencies interested in environmental education.

Regulations. Draft regulations have been approved by the Advisory Council and the Office of Education and are being reviewed for approval by the Department. It is hoped that the approved regulations will be published in the Federal Register in early March of this year.

Criteria. Fiscal 1973 proposals will be evaluated on the basis of the eight criteria developed by the Advisory Council. These criteria are listed in the draft

regulations and the draft Handbook for the use of applicants and evaluators. In addition, suggestive-explanatory factors responsive to criteria items are also indicated in the draft regulations and the draft Handbook.

The Advisory Council and OEE

The National Advisory Council for Environmental Education has served as a resource for OEE policymaking.

In their first annual report, released in March 1972, the Advisory Council made several recommendations concerning program priorities for OEE. These recommendations were incorporated into the 1973 draft program regulations, the draft Handbook, and funding strategies. Sixteen of the twenty-four recommendations made by the entire Council and its subcommittees in the March 1972 report have been implemented in whole or in part. These include a deemphasis on funding of state planning for environmental education and an emphasis on small grants or other projects with substantial community group involvement and participation. Some of the recommendations, although desirable, proved to be unfeasible.

We feel that we have been successful in establishing a cooperative, productive, and mutually supportive relationship with the Council in spite of mutually shared difficulties occasioned by fiscal constraints.

THE FUTURE

There has been no request for funds for the program for fiscal 1974.

In addition, I have received no indication to date concerning the Department's or Administration's position on the extension of the Act. Whatever the decision is, of this much I am sure: environmental education has taken hold in the years 1969-1973 and it will continue to evolve in the communities, schools, states, and regions of our nation.

JAMES ALDRICH, Conservation Foundation: Thank you, Linda. We had intended after each of the presentations to allow a couple of minutes for clarification questions. It seems unfair to put Linda in a position of trying to field those, but if people want to register questions, which we will pass on to Walter, I'd be glad to entertain two or three, and if Linda can add something to it, then fine. Has anybody got anything that they want to propose at this point?

BARRY JAMASON, New York State Education Department: Congressman Brademas mentioned the fact that the Office of Education had tended to de-emphasize its support for elementary and secondary education projects in favor of other public non-profit and private non-profit applications, and yet I recall 12 to 18 months ago that I saw some minutes of the Advisory Council's deliberations which recommended that emphasis, in spite of the fact that it was, as Congressman Brademas pointed out, contrary to the spirit of the legislation. So it seems that the office staff itself did not intend to redirect that policy on its own, but rather the Council advised it to redirect it. Could you clarify this?

LINDA LEE, National Advisory Council for Environmental Education: Let me try to by referring you to some tables that appeared in Mr. Bogan's statement which I didn't read for obvious reasons. One particularly, Table I, in which he discusses environmental education awards by category during fiscal 1971 and 1972. I think where we get into trouble in our definitions here is when we're talking about assistance going to state or local education agencies per se, or to particular projects within those school systems, whether they be for curriculum development or pre-service or in-service training, and so on. I think when you look at this breakout you'll see that there isn't really that much inconsistency, in terms of the Congressional intent. Elementary and secondary education is emphasized. Many of the things which fall under personnel training, instruction, and curriculum -- particularly in Table I -- went through the school system. There are also publications indicating in some detail by project description how each one is broken down, where it went, and what exactly it was designed to do. Now this will further clarify the point. I think the Congressman mentioned only the 1971 grants and not the fiscal 1972.

BARRY JAMASON: Of course in 1972, the largest category in terms of grants awarded -- curriculum development -- has been eliminated completely, and, although the supplementary materials category as such doesn't exist, I would say that the resource materials category probably replaces it. I just have a feeling that the Council has advised the Office in policy matters in a way that hasn't been really consistent with the spirit of the legislation. I don't want to use New York State as an example, but I will. We received 11 projects last year and only 3 were school districts public education -- that's a pretty low percentage.

JAMES ALDRICH: Barry, I'm going to interject and ask that we hold that until later discussion unless Linda feels that there is a particular point to respond to.

GEORGE ALDERSON, Friends of the Earth: I would like to register a question. At one point, Marland said that OEE was supposed to coordinate some other $15,000,000 worth of Office of Education money that's supposed to be going into environmental education. I just wondered if we could find out the results of that function they were supposed to perform.

LINDA LEE: It's to that particular problem that Mr. Bogan makes reference on pages 3 to 4 of his statement. You will find for fiscal 1972 a descriptive list of projects totalling over $11,000,000 in funds coming out of the various other grants -- other programs that he listed above there. It was submitted to the Commissioner, and this list or portions of it will be announced when the Commissioner has approved it for dissemination. And that's exactly where it is at the moment -- in the office of the Commissioner.

JAMES ALDRICH: Then, if there are no other questions, I think that I'll move on to Dick Myshak.

RICHARD MYSHAK, Minnesota Environmental Sciences Foundation: The educational world characteristically responds in some fashion to national priorities. Public Law 91-516, establishing the Office of Environmental Education and the many state Environmental Education Acts relating to environmental conservation education, established without a doubt

that national environmental quality through education is a leading national goal. Arriving at national standards and guidelines is a major goal that is yet to be achieved. Underpinning the success achieved locally, regionally, or nationally is citizen and organizational awareness and understanding -- the mission of all environmental education programs. Without the acts we have mentioned there can be no rational support for environmental quality nor rational examination of the many alternative solutions to our current environmental problems.

President Richard M. Nixon in his introduction to the first annual report of the Council on Environmental Quality in August 1970 stated, "We must seek nothing less than a basic reform in the way that society looks at problems and makes decisions. . . .It is also vital that our entire society develop a new understanding and a new awareness of man's relation to his environment -- what may be called 'environmental literacy.' This will require the development and teaching of environmental concepts at every point in the educational process." HEW's Assistant Secretary Sidney Marland, Jr., our nation's highest education official has stated that environmental education is education that cannot wait.

If environmental education is education that cannot wait, and if we are to achieve environmental literacy, and if such goals require the development and teaching of environmental concepts at every point in the educational process, I then ask: where is the support to back up these noble phrases? Support for the Environmental Education Act by HEW and OE has been glaringly weak. Its support for financial assistance to implement the Act has resulted in regressive funding levels. For instance:

-- FY 1971 -- $5 million authorized, $2 million appropriated, 40.0%

-- FY 1972 -- $15 million authorized, $3.514 million appropriated, 23.4%

-- FY 1973 -- $25 million authorized, $3.18 million appropriated, 12.7%

Now, Mr. Brademas announced that I have resigned from the National Advisory Council -- which I did. There are a

number of reasons for that. In visiting one of the Congressmen, my own Congressman from Minnesota, I felt that he needed to know that I had resigned and I personally delivered my letter of resignation to him. He said, "Dick, some of the blame belongs with Congress. We did not appropriate that money." And I said, "Sir, I have a Board of Directors that I work for also, and consider my Board of Directors comparable to Congress. If I don't ask them for the money, I'm not going to get it."

In trying to do more relative to making some comparisons here to show you what the need is as stated here, or what an environmental educator thinks, or feels, I tried to search around and find a group that I could use as a kind of kick-off point and I couldn't help but come back to my own little shop.

For the past six years, I've served, as it states in my paper, as Executive Director of Minnesota Environmental Sciences Foundation. Our Foundation was established to provide leadership in curriculum development, teacher and adult training and natural area development and utilization programs, and a brief summary of what we have done these past several years is indicated below:

-- 24 published units of instruction
-- 59 unpublished units of instruction
-- published Teacher and Resource Managers handbooks with 15 accompanying units of instruction for use on governmental natural resource areas
-- published handbook for vocational-agriculture students entitled "Managing Natural Resources -- Air, Water, Soil and Habitat for Wildlife"
-- 179 school and park sites developed and programs planned for outdoor learning experiences
-- 1,772 student participants in youth programs conducted
-- 324 programs for 9,095 teacher participants
-- approximately 4,500 adult leader participants in workshops, classes, etc.

Ironically enough, our organization was founded by federal funds -- Title III funds -- back in 1967. Today, we find that approximately 60 per cent of our funds for operation come from the federal government, the remainder from fund-raising, fees, and contracts.

I relate some of these figures to you because over the past six years we have built up what I think is a fairly decent staff -- one that I think has achieved the goals we set for ourselves.

More recently, because of the types of crunches that are coming about such as the stock market and revenue sharing, I have found myself during the past six months spending all my time, not in environmental education, but in fighting a battle of survival. I think this is what is happening to many groups in education. And why should education that can't wait have to fight for survival? Why in the colleges and our universities, why in our public schools, and why in Sierra Club or Audubon Society or National Wildlife Federation or the Izaak Walton League? All of these groups are trying to do something in environmental education. Why do they have to scratch, when we know well that there is money being utilized for other types of things that could be more effectively channeled to reaching or providing for a quality of life.

I released three staff members last October. I released one on February 15th. I've given notice to five more people who are leaving on April 1. This is a sad state of affairs -- not the fact that I may lose a job. But I think that we have done something, and I'm proud of what we've done and I know that there are many other organizations throughout this country that are doing the same thing. Go right around this room and look at some of them. I think of Chuck Roth as being one; everybody knows what Chuck has done. One might ask from the standpoint of groups such as ours, isn't such leadership in environmental education the role of institutions of higher learning? In Minnesota, the enrollment in our institutions of higher learning has fallen so drastically that we may close one junior college, one state college is reducing by 78 its total staff membership, and another is reducing its staff by 33 per cent. Well, now, how can our institutions of higher learning do more? Their student contact hours are going to increase, so where do you shift this type of responsibility? I think that we are going to have to depend upon groups that really fall under the non-formal educational structure. I may be belaboring you with what may appear to be braggadocio, but the purpose is of course to build a case for continued and expanded federal support for the environmental education of the many groups across the country who are increasing environmental literacy and in most cases on a shoestring.

Now I'm going to refer to some things that I think validate the type of cries that are being heard. In 1971, Governor Wendell Anderson, by executive order, created a 30-member Minnesota Environmental Education Council. That council, among its many tasks, set out to assess the environmental educational needs of Minnesota. Yes, and the Office of Education did support this, thank heavens, or it probably would never happen in our state either. This assessment was accomplished as follows:

1) Written surveys directed to all of Minnesota's public school districts, approximately 100 voluntary organications throughout the state that are interested in some aspect of environmental education, and all municipalities over 2,500 population;

2) Six fact-finding meetings conducted at strategic locations throughout the state, at which representatives of educational institutions, voluntary organizations, governmental units, and business and industry made recommendations regarding needs in their respective areas of interest;

3) Review of proposals submitted by various organizations to the U.S. Office of Education for funding environmental education programs as described under P.L. 91-516, Section III; and

4) A symposium on environmental education in post-secondary institutions, attended by representatives of most of Minnesota's colleges and junior colleges and several vocational-technical schools.

From the surveys of school districts:

-- 83% of the districts report that development of an environmental education program is needed, but

-- only 2% have a formal policy regarding the program;

-- 12% have budgeted funds for environmental education, and

-- 21% have assigned responsibilities for environmental education to a specific person;

-- 21% of the districts report that adult citizens have asked that greater emphasis be placed on environmental education, and

-- 30% state that students have made similar requests.

The school districts go on to report that:

-- 17% have provided environmental education training for their teachers on the local level, while

-- 89% say they need area workshops on environmental education for their teachers, and

-- 85% would like environmental education consultants to come to their schools to conduct in-service training programs.

-- 50% of the schools are using environmental education materials obtained from the Department of Education and Department of Natural Resources, and

-- 23% are using such materials obtained from other public agencies, but

-- 90% state that they need more and better curricular materials directed to the local schools' needs.

From Minnesota's voluntary environmental/conservation organizations:

-- 93% report that environmental education is a major goal of their organizations.

-- 83% have resource people available to work with other groups, but

-- only 41% have actually conducted workshops or classes during the last year, and

-- 4% have received state or federal grant funds to conduct their programs.

-- 78% say they need information about and coordination with other groups to operate effectively.

-- 59% would like opportunities for training sessions for their leaders.

From the six regional fact-finding meetings:

-- establishment of resource teams made up of local environmental specialists with the direct involvement of local school systems;

-- development of mobile materials and resource units for use by schools and community organizations;

-- more emphasis on adult education, particularly directed toward local decision-makers;

-- more use of local leaders as resource people;

-- establishment of regional environmental education councils;

-- provisions for communities to develop programs which fit their unique needs;

-- ready availability to each school district of an environmental education coordinator; and finally,

-- "regional development and implementation is the only method which can really succeed."

Among Minnesota's municipalities, survey results show that little in the way of environmental education efforts are presently taking place:

-- only 18% report having an environmental advisory commission;

-- 11% have sponsored environmental education activities, yet

-- 71% believe that they should be promoting and assisting with a variety of environmental activities ranging through pollution control and abatement, recycling, urban planning and environmental education programs.

Clearly, these major segments of Minnesota's population recognize the need for enhanced environmental education efforts and are expressing interest in helping meet this need. Over 95% of the schools have responded to the survey questionnaire, and more than 85% of the voluntary organizations and 60% of the municipalities have done so. These respondents, and people from throughout the state who participated in the six regional fact-finding meetings, have left one message that has overshadowed all others -- "We're interested in doing the job, but we cannot do it effectively without guidance and coordination that is readily available to us on the local and district levels."

These data strongly indicate a need for assistance -- assistance that is slow in coming. These needs are the "education that cannot wait." How can we meet these cries for help?

On June 30, 1973, the present environmental act expires, as Congressman Brademas told us, and on the 7th of February (this past month) Congressman Brademas did introduce a bill that extends the Act and I guess one could ask himself the question I've asked myself -- is this going to be adequate? And I say, "No, the present Act is not adequate and must be changed." I think that the new Act must precisely describe the role of the Office of Environmental Education so there won't be any question later on of what they are doing. You ought to place the department of environmental education in the division of federal government that will respect its role and support it. Apparently, it is not respected or supported where it is. And I think we ought to precisely describe the role of the Advisory Council to the Office of Environmental Education, reduce its membership from 21 to 15 and permit its chairman to be elected by the council members. Why do I say precisely describe it? Because I think that not only among the members of the council, but even in Congress, there's a misunderstanding of what the role of the Council was to be. I know I had a hard time trying to figure out what I was supposed to be doing. The areas of program support should be more precisely defined and proportional levels should be assigned, based upon identified priorities. You look at the current act, and it covers everything from A to Z. What is most important there? Should we describe some proportionality of how the funds should be distributed? I think there ought to be some consideration given to that. Provide for requests for proposal -- RFP's -- so that certain things can be done. Linda, in reading Walter Bogan's statement, talked about an assessment, and I didn't catch for sure what was said there. But has there ever been a national assessment conducted on the state of the art of environmental education in our nation? If we're going to prescribe what needs to be done, I think we need to know what we're working with. In Minnesota, we did it -- we conducted an assessment for the state. We now think we know where we can go and what needs we need to fulfill. But on the national level, I know of none. We need to provide for decentralized efforts of the Office of Environmental Education that would permit more rapid dissemination and commun-

ication processes. Now this is not to say we should emasculate the Office. I think the leadership must rest there, direction must rest there, but the time lag that exists between the Office of Environmental Education and those of us still riding the covered wagon west is just too long. Lastly, I think we need to provide funding levels that will realistically support the programs and priorities of the bill. You just don't arbitrarily pick numbers -- 5, 10, 25. I've seen Congressman Brademas's bill and it's now 10, 20, 30. If it is based on an assessment of needs on the national level, maybe it'll be more like $100,000,000 - $200,000,000 - $300,000,000. The President of our foundation has said that "Sound education is indeed a common cause, and environmental education is the cause of everyone -- you and me," and I added, "the Congress and the President." Why? Because this is where a lot of the talk is from, and I'd like to see the action come from them also.

JAMES ALDRICH, Conservation Foundation: Thank you, Dick. Again, we will pick up a couple of questions to clarify points and then move on. Anybody want to pose something to Dick at this point? Okay, fine. Then we'll switch to Sam Natoli, the Associate Director of the Association of American Geographers.

SALVATORE NATOLI, Association of American Geographers: As I read my role here, it says that I'm supposed to react to the Environmental Education Act from the viewpoint of a professional organization. First of all, I represent a professional association which has had an historic commitment to the environment and, as such, the study of geography could be construed as environmental education. In order to make more sense to you, I'd like to present a very brief background about the AAG, who we are, what we do, and then how we view what has been happening with the Environmental Education Act. First, the Association of American Geographers is a scholarly association of about 7,000 geographers. Its major purpose is to further scholarly investigation in geography, especially in education, business, and government. Our membership consists of approximately 80% academics. The preponderant percentage of this 80%, approximately 65%, are people in higher education. The balance are people in elementary and secondary education. The balance of our membership is distributed among business, government, and industry.

The traditional role of professional associations such as ours was largely to serve a member with similar interest and to provide outlets for the kind of scholarly work which they had done via scholarly journals and meetings. Within the past decade, the role has changed. Many professional associations in a sense have viewed themselves as providing national leadership for the kind of information their discipline represents. They can disseminate the kinds of information and knowledge their discipline represents and also serve as catalysts for change among their own members to see that such knowledge and information are advanced. They have been engaged in numerous research, curriculum educational, and training projects. As action groups -- as opposed to the traditional gentlemen's clubs -- they now have become more social-serving than discipline-serving. Furthermore, we have established a number of criteria that we use whenever we enter into any kind of project. First, the project needs to be nationwide in scope. The Association generally will not attempt to accomplish what individuals or individual geography departments can. Second, it should have a professional impact. And third, it may be the kind of project the Association needs to take leadership. The last named applied to projects which may not be as broad in scope as we would like, but it seems to be something that needs to be done and we would like to be the seed or the catalyst to get it going.

Because of the nature of our Association and the responsibilities we have to our constituents, our role in environmental education as in other research problems and in geographic education has largely been philosophical or conceptual. We do not have a direct pipeline to, let's say, community groups. Our pipelines are largely to school people in elementary, secondary, but mainly in institutions of higher education. Therefore, the effective kinds of projects we manage and direct have to fall both within our guidelines and within a conceptual framework.

Geographers welcomed the Environmental Education Act because it was something to which we could offer a particular expertise that a lot of other disciplines and environmental groups did not have. All geographers are trained in a holistic tradition which views the environment as a system which possesses a real differentiation. We had people trained with specific environmental skills, such as the ability to do inventory work, to make recommendations

for strengthening existing geographic, environmental, or conservation education and are able to translate this easily into an environmental framework. We have a great deal of experience and a massive body of research on the environment. The guidelines from the Office of Environmental Education in general arrived with insufficient lead time for us to develop meaningful long-range projects. We, too, are an organizational bureaucracy and it takes time for us to call a group together to write a proposal and to get our Council and Project Planning and Development Committee approval. The specific focus on local community projects, plus the inadequate lead time, presented us with a number of disadvantages. Be that as it may, we have made Herculean efforts to participate in environmental education programs -- not only because we believe in them, but also because we have the capabilities to provide national leadership in them and to enrich them. We have been asked to give consultation advice to the Office of Environmental Education and we are interested, of course, in seeing perhaps that some of the bugs that exist now in the Office of Environmental Education are worked out in order that it may properly go about its business.

JAMES ALDRICH: Thanks. I'm going to move over to Bob Cook and then to Bicky before we take a break.

ROBERT COOK, Alliance for Environmental Education: Okay, Jim. Although I'm here representing the Alliance for Environmental Education, I'm on the staff of the University of Wisconsin at Green Bay. While I am not speaking officially for the University of Wisconsin-Green Bay or for all of higher education, I would like to point out a few things that I have observed in the three years that the Act has been in existence. Many of the things that I think are highly important Dick Myshak has pointed out in his report on recommendations.

If you start out with the statement of findings and purpose in the original Act, you see immediately the need for a new language and a new description because this is a very important part of any act that is going to be responsible for a program such as environmental education. Many of the interpretations that are later going to take place will find their way back to the statement of purpose. I think here's where higher education really suffered, because it's very difficult to find a role for higher education in the statement of purpose in this Act, unless you look at it in a supporting role for the things that are happening in K-12 education or in community groups. This goes back to my undergraduate degree in conservation of natural resources,

and one of the things that I used to hear is that you can't teach the old boys, so the future lies in the youth. We've got to educate them. I don't know, but I think that philosophy was present when they wrote this statement of purpose. You might say that, later on, when they provide for community education programs on preserving and enhancing environmental quality, this is the new vision. But really, it isn't. It's one of the oldest ones that we've ever had embodied in the university extension. So, taking K-12 education and the university extension and putting them together doesn't do much for higher education.

Higher education needs support in this legislation as well as K-12 and adult education. Dick pointed out that university enrollment is having problems -- we're also having budgetary problems. That's true. One of the things we are searching for is the relevancy -- if I can use the word -- in higher education, and they're looking for something that really fits. Students today want to see that what they're talking about in a classroom is really happening or is applicable to what is going on outside. This attitude has been in higher education for a number of years. They have been trying to get their students off campus, rubbing shoulders with community people, businessmen, trips to Europe for other cultural experiences, and other things.

At the University of Wisconsin-Green Bay we have a program called Community Outreach. What we've attempted to do is to eliminate the middle man or the extension program and put our faculty and students in direct contact with people in the community. I think this is what we have to do in this Act -- that is, bring together three major components. One is higher education -- and by this I don't mean only four-year degree-granting programs. I mean vocational-technical junior college systems and so forth. The second component is K-12 education, and you can include pre-school. The third component would be community. I think that we are seeking to get a blend and a mixing and an understanding among these three components. This should be taken into consideration when writing a new statement where the focus of environmental education is through the OEE. It should encourage an interaction between at least two of the three components in every project or program that's undertaken. And this doesn't mean only at the administrative level. This means at the student level. Before a mini-grant is given to a community organization to put on a workshop, they are to show that they are going to bring in some college students, or some students from the community or from the community educational system, and work them into that community workshop experience. I think this is what we are

really trying to do here, develop a new definition and include what we really mean. It's very difficult to look at the programs that have taken place under the Office of Environmental Education and relate them to the statement of findings and purpose.

Higher education has done quite well when you look at the categories of awards, but I think they can do a lot better and be more effective if we recognize that they need to be a part of the team and not just standing in the wings, so to speak.

JAMES ALDRICH: Thanks, Bob. We will take a break just after Bicky who turns out to be our anchorwoman, and then come back for some general discussion which I hope will explore the presentations and issues more in depth. Bicky.

BICKLEIGH DODGE, Zero Population Growth: Several speakers have already alluded to the fact that two years ago Environmental Education was "the education that cannot wait." I'm afraid that became one of the phrases that's come back to haunt us with bitter irony. Today, the program is not only still waiting; it seems to be in imminent danger of being wiped off the face of the map as a federal program. There are three main arguments advanced by environmental education's official antagonists, and I would like to discuss each one of these very briefly, from the perspective of Zero Population Growth as an environmental action organization which has had an interest in the program and has tried to follow its vicissitudes.

The first one of these arguments is: we don't need separate legislation. We have the authority elsewhere. The second one is: it's a narrow categorical program and therefore is in conflict with Administration philosophy. The third argument is: it's failed anyway.

The Act was originally opposed by HEW officials on the grounds that separate legislative authority was unnecessary. The Office of Education claimed that it was already supporting environmental education, and it claimed that it would continue to mount a substantial environmental education effort through other authorities, even after the Act was passed. The environmental education program itself was seen as core funding

and a unifying force. This rationale, the so-called "synergy aporoach" referred to by Congressman Brademas, was actually used as justification for keeping appropriations for the program low, since OE claimed that in fiscal 1972, for example, it would spend $11,000,000 on environmental education through other authorities. The synergy strategy has actually resulted in a numbers game of sizeable proportions. In fact, the final list ostensibly documenting the $11,000,000 claim has been sitting in the Commissioner's office for several months at least. Apparently he's too embarrassed to release it, and well he should be.

If you read between the lines of Walter Bo an's statement, he refers to the Office having prepared evaluations of the potential contributions of the projects listed in this $11,000,000 list. I believe it's a fairly devastating evaluation. The validity of many of the projects listed is extremely dubious. Even if other authorities were doing what -- according to the synergy strategy -- they should be, they are limited in the scope and target of what they can do. Title 3 of the ESEA, for example, is limited to local education agencies and other restrictions operate on Title I of Higher Education and in EPDA. The Environmental Education Act is the only act which can support activities that are not pre-designated, which can support non-formal education projects through community groups, and which can permit training in environmental skills of broad sectors in the community, not just of education personnel. No other OE authority can claim these features. The legislation took great pains to establish the program's breadth of scope and intent and administrative pronouncements have reiterated that breadth over and over. Yet now the executioners of the Act claim that it's a narrow categorical program and thus inconsistent with the administration's "new federalism." I would like to quote from Commissioner Marland's description of the program in his article entitled, "Environmental Education Cannot Wait" in May, 1971. He said: "Environmental education can be the core, the unifying concept around which Office of Education categorical grants can be coalesced into a modern educational response to the environmental/ecological crisis." That doesn't sound like a description of a narrow categorical program to me. If anything, in fact, we would criticize the program for having been too broad in the past, for having stressed broad "process" goals almost to the exclusion

of environmental content.

Friends of the Earth has just completed a very interesting survey of all 1971 and 1972 grantees under the Environmental Education Act, and I believe there are some copies available out on the table. (See Attachment 1.) Some of the data in that study will illustrate what I'm talking about. Grantees were given a check list of environmental subject areas and asked to estimate the degree of orientation in their projects to each of those subjects. The list corresponds to the seven specific areas catalogued in the legislative definition of environmental education, and I won't read it again -- population, pollution, and so forth. Despite the breadth of this list, the data from grantees indicated that, in 1972, nearly 30% of project resources were devoted to subjects other than any of those targeted in the Act -- a higher proportion, in fact, than went for any of the specific areas mandated in the legislation. The point here is that environmental literacy requires substantive knowledge and skills. It is still a young field, and much of what has passed for environmental fact -- in population matters, as well as in energy, land use, and so forth -- has been at best unsophisticated and, at worst, just wrong. We really need to equip all kinds of people with the knowledge and the tools to fight the environmental battles that lie ahead.

Let me just turn briefly to the final argument -- that the program deserves to die because of its performance. We've all, of course, been disappointed in our expectations of what it could have been. The problems that have plagued OEE were and continue to be monumental, and Congressman Brademas catalogued a number of them: bureaucratic delays and snafus at every stage of the game and, of course, almost no money. After that kind of treatment, the comptroller of HEW now suggests that the program has failed. That strikes me as cynicism akin to that of the boy who kills his mother and father and then pleads to the judge for mercy on the grounds that he is a poor orphan.

There is some question as to whether OEE can fully carry out the program coordination that it was intended to do. Its location within the federal structure may make some difference, and I concur with Dick Myshak's recommendation that it be located in an hospitable environment within the federal structure. Other possible sites include NIE, the Assistant Secretary's Office, NSF, EPA, or CEQ. Really effective coordination may not be possible even with reloca-

tion, but without it, such coordination seems clearly impossible.

Ralph Nader was once asked whether he believed in capitalism, and he replied, "I don't know. We haven't tried it." I think the federal environmental education program is in somewhat the same category -- it's time we tried it. Whether or not it expires first will depend a good deal on the amount of public and Congressional concern which is expressed in the next few months.

JAMES ALDRICH, Conservation Foundation: Thank you very much, Bicky. Now we are going to take, I hope, just a ten-minute break. That will give us a little over an hour for some general discussion which I think is the real meat of our forum and the major reason most of us have come here together.

BREAK

JAMES ALDRICH: Could we get started? I assume there might be some questions or comments. Is there anyone who wants to dive in at this point and maybe pull people's attention back to the table? Bill?

WILLIAM ELAM, National Council for Geographic Education: I would like to express an opinion which I think a number of you share with me. The first hour probably did us all a service in that we all had our feelings eloquently put out on the table. But I also share another frustration, and that is coming across the country to attend this forum. I'm going to be, personally on behalf of my organization, somewhat frustrated if I feel at the end of this forum a continued sense of futility and frustration. As I look around the room at the potency represented by the organizations here in terms of membership contact and in terms of population impact, folks, I would submit that if we can not find a way here in our ranks and our forces to effectively fight the battle that Congressman Brademas laid in front of us, then we must probably generally recognize that OMB has done us in. I think he has expressed -- whether you agree with some of his individual points or not -- I think he has expressed a willingness -- at the Congressional level -- to fight on behalf of what we all believe in.

Now I represent a single organization, but I'm also here representing another force which Bob Cook has alluded to and that is the Alliance for Environmental Education, Inc., a coalition of organizations who share a common cause. This is one approach that we immediately subscribed to when we knew of its potential for existence because we feel the need for melding forces. I think perhaps we need to go even beyond it, or expand it, or do something that would incorporate the talent, the pressure, the force, the impact that we all represent and share, and I would hope to hear from a lot of my colleagues whom I know in the room (and some that I don't know) in terms of what we think can be positive steps, in terms of joining forces to bring about the kind of awareness on the Hill or where have you, that there's an awful lot of people across this country that don't like the way things have been handled and want to see it changed.

ROBERT COOK, Alliance for Environmental Education, Inc.: From what has gone on here today, and from what is being said, one of the basic questions that is going to have to be answered is: where in the federal government can you find a favorable home for an office like this? I think it's been brought out several times, and it's very basic -- if we can't find someone before this bill is passed who wants it you're not going to legislate it on anybody. It's taken us three years to learn that, and if we can't learn anything in three years then I think there's something wrong with us. The other thing you might do is look and see why it hasn't gone in the Office of Education and as you pointed out there were some basic objections and can those objections be reversed? But I think that's a basic question that has to be answered. I don't have any suggestions.

DENNIS BREZINA, George Washington University: I don't have any answers, but I had the opportunity of a couple of learning experiences that provide some insight. I worked with Senator Nelson when the bill was going through the Congress, in helping to work on the appropriations processes and I've just finished a book that should be out this fall on the Environmental Education Act mainly from the political science point of view. And one thing I found out after writing a book about it, I played a much less significant role in the whole thing than I thought initially I had.

One of the things I'd just like to bring up: if you start raising the question of where else can it go, you're raising all sorts of complex, political issues. Mr. Brademas might like to see it go with EPA. Mr. Brademas has no jurisdiction over EPA, and no way of helping it through -- well, I won't say no way, but he's got a lot of fish to fry, and so Mr. Brademas would like to, I'm sure, see it go someplace he has some jurisdiction over. If you talk about some other agency, you're talking about setting up a new cast of characters.

One thing nice about this bill is that the skids were greased initially with respect to not only the legislative committees but also the appropriations committee. And there are some friends on these subcommittees -- HEW, and the Senate Labor and Public Law for the Senate/House Labor and Education. I'm not saying that that's where that friendship stops, but one reason that OE doesn't like it is because Congress almost literally jammed it down its throat and this was occasioned primarily by the fact that Mr. Allen left when he did. He was a very firm supporter of this effort and later, towards the end, before he made his unfortunate, at least from OEE's point of view -- his speech on Cambodia, he came out before he left in favor of the legislation. So most of the power for the Office of Environmental Education lies within the OE Environment Education structure. One of the points that Mr. Brademas makes is that Congress should have a say -- not in how the bill is administered, necessarily, but in where the bill should go and what should be done with it. You have got that invisible network already set up. If you start talking about other agencies that may be much more hospitable, you have to weigh in carefully to what degree will they have Congressional support, and this is not an Administration where new ideas are popping through very quickly. It is not frustration, as I see it, it's focusing and I don't know how you focus. The thing about this bill is that it has a very interesting clause in it -- the Pell Committee purposely put in the Pell amendment for reasons other than environmental education. It is a structuring unit and deals with coordination functions and so on and so forth, within the immediate office of the President. Well, they were testing the Administration way back in 1969 and 1970, because they were getting increasingly frustrated about all education programs. This is the first time they've done this, and it became a very controversial measure, and that's one thing I started finding out after I was writing this book. This is their testing period for the Elementary and Secondary Education Act which is just now up before the House and Senate. In other words, they saw revenue-sharing coming, and they

wanted to have handles on these bills to be able to have greater leverage. That was their perception. Now, I am not defending it; I am just trying to explain it. There was something very special about that, and I felt that, after this went through, the other agencies had moved back in '71 and '72, before the election and probably had a much better chance than now. That's my personal opinion.

ROBERT COOK: This testing mechanism, was this technical assistance or was this to be. . .

DENNIS BREZINA: The section actually creates the Office of Environmental Education and that's why the Administration said that it was telling them how to administer the program. They couldn't put it up in the Office of the Commissioner because we have too many other things and this is one of the things that prompted Mr. Brademas to quote Mr. Marland as saying "that there is nothing higher than a, say, GS-15."

I don't want to go on and on, but I just want to say one thing about higher education. One of the main reasons there, again, was jurisdiction. If they had had too much environment with higher education in it, they might have lost jurisdiction with the Brademas subcommittee and never gotten anywhere. It was not deliberately overlooked, but the idea was to get it through.

SALVATORE NATOLI, Association of American Geographers: Looking at the Environmental Education Act from the viewpoint of the professional association, one of the reasons why professional associations such as ours, which deal with a single discipline, had welcomed the Environmental Education Act was that its Congressional approval coincided almost simultaneously with the demise of the Basic Studies program in the U.S. Office of Education which had been supporting advancements in teaching subject matter fields. The Environmental Education Act would provide an opportunity for the subject matter disciplines to continue their attempts toward instructional innovations.

The original guidelines for proposals for the Environmental Education Act spoke of multi-disciplinary programs (the original terms, I think, which George Lowe had used, was that it was an a-disciplinary program). It seemed that the guidelines encouraged local action type programs rather than those which would be conceptually rich and substantive.

As a reviewer of proposals, I discovered that many of the proposals which had been submitted and eventually many of the actual funded programs seemed to have very little substance in terms of any discipline. They were mainly reactions of a sort to particular environmental crisis-types of problems, such as pollution. The proposals seemed to emphasize "process skills," such as "how do you sue a local polluter?" rather than finding out just what constitutes the condition of the environment. How do you improve it? What are the criteria for environmental quality? Professional associations representing scientific disciplines became very frustrated as to how they could participate effectively in this kind of program.

BICKLEIGH DODGE, Zero Population Growth: May I augment what you said, Sam? I think the 1973 guidelines were more substantive. So there is evidence, although we will have to wait until the grants are awarded to see for sure, that the Office is getting more focused. In the Friends of the Earth's survey there are some very interesting comments that came from grantees, when they were attempting to explain precisely what it was that they were doing in their grants. And it is very difficult to tell from some of the explanations, exactly what subject was being stressed. For example: "personal family values as they affect environmental problems" or "our approach as a total environment treatment." Now, can you tell me what they are doing? "Total integrated systems view of all of the above." This was asking them to tell us precisely what they were doing, but they told us more how they were going to address whatever it was they were doing, rather than telling us what they were doing. And one grantee admitted "no specific orientation at this time," which was rather odd in December, almost half-way through the grant period. So I think that there is room to tighten up. They could tighten up a good deal still without becoming a narrow categorical program.

SALVATORE NATOLI: Well, I just want to get back to a point, which is the most disturbing thing to me. One of the great dangers lies in the social climate in this country which will permit the Congress to drop any education program. There apparently isn't any groundswell of opposition to it. This is the more serious problem, to me. Because the environmental education program has the word "education" attached to it, I am afraid that it might

go the way of all other education programs. The NSF education budget has been slashed -- slashed unmercifully. You don't really find any organized opposition to these cuts, except perhaps from the academic community and some people who have been committed to education reform. People are standing around feeling helpless, not knowing what to do. Now, I don't know how this fits in, really, with what we might want to recommend here -- whether we should just sit here and be frustrated and say it's really hopeless, or to make, again, some very specific kinds of recommendations.

JAMES ALDRICH, Conservation Foundation: There is an interesting problem of definition going all around the table here. Linda, you wanted to raise something.

LINDA LEE, National Advisory Council for Environmental Education: Well, I think that Sam has made a very interesting point, that it is precisely because environmental education is not narrow and categorical, that its constituency is seemingly diffuse. I think the cries are loud and clear from some of the categorical program grantees. Libraries come to mind as one in particular where you have a program that has gone on for a particular period of time has become pretty well entrenched, and you have a very well defined constituency. It is easy to find them and pick them out. They are lobbying in great numbers and vociferously with their Congressmen and Senators as, I think you will find, is the case with lots of other categorical grantees with programs that have become almost little fiefs. One of the problems that environmental education has had within the Office of Education is that the whole idea of synergy was completely contrary to what the entrenched bureaucrats wanted. They didn't want to give up anything for something called "Environmental Education," when they had something called whatever it has been called for 20 to 30 years. So, I think in a sense, by being broad, by being multi-disciplinary, and all of these good things, we don't have the constituency ready and willing to jump on the bandwagon now when we need them.

ROBERT CAHN, Christian Science Monitor: I may have missed something, but has there been a discussion, or can there be any discussion of where we might go aside from OEE or Office of Education to look at what opportunities, or how we might structure to get more environmental education done outside the federal government umbrella. I might

mention that there is support, I think, in Congress and in the nation for these things. For just one example, Monday, at a hearing of the Senate Interior Committee on National Land Use Policy, both governors and members of the Committee spoke of the fact that you couldn't have a successful Environmental Land Use Policy Act without the environmental education that preceded it, to make it work. And you hear in EPA and in all of these things that you have to have environmental education some place built in, through our schools and through our citizen organizations.

JAMES ALDRICH: I think one of the testimonies to that interest and that need is the fact that this group has come together. It is a rather unusual and diverse collection of environmental education interests.

ROBERT CAHN: I would like to see some discussion of "where do we go from here?" Aside from the federal umbrella.

JAMES ALDRICH: Tom, are you coming in on that point?

VERNON GILBERT, National Park Service: Well, I wasn't going to come in on the point of where we can go aside from the federal government. Since the topic is "Support for Environmental Education, Where Do We Go From Here?," I would like to get the focus off just the Office of Education for just a minute. I was hoping someone would mention the National Park Service, so that I wouldn't have to, but just to add a bit of an optimistic note, we are moving along in the environmental education programs of the Park Service. Our objective is to use our resources, which are tremendous, and our considerable experience to set an example and to act as a catalyst in environmental education.

At the Second World Conference on National Parks, we had a session on the role of the parks and equivalent reserves in environmental education. It has generated a tremendous amount of interest from a number of countries. Right now I have got letters from at least a dozen countries on my desk. In a way, we are becoming a little division of international affairs. The environmental study area concept, the environmental study area program is our basic program, and I think it has a lot to offer. Dennis, how long ago was it that a bill was introduced, the NESA Bill?

DENNIS BREZINA, George Washington University: The Senate Interior Committee in the last Congress.

VERNON GILBERT: This is another way to go. At the Second World Conference one of the recommendations was that we have an environmental education emphasis week. We started it last fall. This was in cooperation with the Office of Education. We are going to continue that. Our Director is going to designate an environmental education emphasis week in the Parks this spring, and the Office of Education is going to co-sponsor this and I hope that this can be expanded to more than just the environmental education emphasis in the parks.

We have entered into cooperative agreement with ACTION, with the Peace Corps, in order to get people, trained people, in environmental education, working in some of the developing countries. So I am pretty optimistic about the Park Service role in environmental education continuing strong.

CHARLES ROTH, Massachusetts Audubon Society: One of the things that may be premature, and I don't mean to sound overly optimistic in this approach, but at Massachusetts Audubon we have been laboring in these vineyards for a long time and it is only recently we have had the advantage of even being able to touch federal funds. We have been standing by with our tongues hanging out for a long time. But, in the meantime, we have had to learn how to get along without it, and a lot of the people that I've seen getting involved in the environmental field have been looking at it, some because they were interested in environmental education; a lot because they were interested in dollars. I think that has hurt us. I think that one of the things that we have been trying to do, and I would throw this open for some people's thoughts, is recognizing that this wasn't likely to last forever, regardless of whether we would like it to last longer. Begin to do some of the political footwork, and I mean political footwork, back home in state legislatures, with the foundations, and so forth, to be able to catch up with some of these things so that when one faucet is shut off you are able to run to another, and recognize that there are a lot of people in the same boat. There are, I am sure, today, sitting somewhere, people in mental health who are doing the same thing we are doing -- librarians and others. What we found is that a lot of them,

too, have not gotten around to doing the nitty-gritty homework. Maybe we'll get to the till before they do, that's what we are hoping.

Another source that we have found is that people are willing to pay for some of the services. One of the things that has hurt is that they have gotten spoiled, to a certain extent, by having so much given to them free that they resent it, at first, when you come back to them and say, "No, you can't have it free any longer -- you are going to have to put money on the line." I kind of wish that some of the acts that we passed would be more encouraging of paying for services that can be paid for and funds being directed to those things that you can't get money for. In other words, to be more specific in how the funds are spent in terms of not causing these climates which make it hard to get on a paying basis when funds run out -- because I don't think that in any of these things we can expect the funds to flow forever. Part of the challenge before all of us is not to look just to the Act, although I certainly am going to fight as hard as anybody to see the Act continue.

In the plan that we have been trying to develop in Massachusetts, we tried to recognize from the very beginning that there isn't enough money in the federal till, there isn't enough money in the state till, there isn't enough money in private tills. It is only going to be through a blending of all of these that we have even the slightest chance of achieving anything. We have to develop sources of cooperation and support to go after priority items and blend funds if we are going to get anything done.

ROBERT ROTH, Ohio State University: O.K. There are a couple of comments that I would like to make. First of all, I would like to go after a point made by the gentleman from the Park Service. We have been looking at two kinds of educational audiences, it seems to me. One I would classify as the formal education group, that is one dealing primarily with the public schools, and then the other educational audience, which would be campers, and all the rest of that vast majority of people with whom we have to deal. A number of the grants issued by the Office have been targeted at those other citizen-action type groups, sometimes even at the expense of those in the public schools. I have been working with our state environmental education supervisors and they have felt particularly let down over the years by the Office of Environmental Education, feeling

that they have not been supported like they should have been. Now I do not know what that "should have been" support calls for, but certainly communication wasn't there, as I feel it should have been. So there are several levels here.

If we are talking federal agencies, then obviously you do have to include the Office of Education because they will be responsible for education in the formal school setting. Some kind of funding is going to have to be there, if that is the route you choose to go. There are other programs from other agencies that do impinge on the formal school setting. We need the program of the Park Service and others of these kinds, but there will still have to be some central responsibility in state departments of education and probably the Office of Education. So, that's a reality that I think we have to take a close look at.

The next point that I would like to move on to is really in support of what, Dick, you have mentioned concerning your recommendations. Reading through those, I concur with most of them very highly. One area in which I am concerned, however, is that the Office of Environmental Education and the Advisory Council have not been able to do all that they were authorized to do, notably, an effective evaluation of the programs and projects. Since I am of an organization, and a university that is concerned with research, this is an area of pretty great concern. There are some areas in which I feel that the Office and the Advisory Council could assume greater responsibility. I would like to read in a few of these items for the record, if I may. First of all, evaluation of projects and programs in relation to financial and educational effectiveness. Now that sounds rather vague, but it is something that we do have to go after, in terms of cost effectiveness and educational effectiveness. I think that there are research strategies that can be used, but most of the research efforts surrounding the funded projects have been subjective in nature. It's just been lately that a few are starting to get on even to the aspect of pre- and post-testing. So. . . that's one area that I think should be explored.

The recommendation of funds to be allocated to each category supported by the Act is another thing that has been mentioned. So many dollars per category, whether it's mass media or whatever it might be. And this too can be based on some research. Dick, I think this is a point that you brought out well. We need some realistic measure of this.

Program planning within the Office of Education for environmental education, that is to coordinate the environmental education efforts within the Office. That would be another function, and something that I think they have tried to do. They probably could be more effective.

The fourth point would be exercising second sign-off responsibility on all projects sponsored by the other agencies and, within OE, that deal with environmental education. If that were reality, this could give them some control over what is and what is not funded, thereby insuring a higher level of coordination.

A fifth point might be coordinating the environmental education activities with other federal agencies and assisting them in defining and clarifying their roles in relation to environmental education. Now, remember when, let's see, Dr. Gilkey was still in command, this was something that was first starting at that point, I believe. Trying to pull together representatives of various federal agencies. I thought this was a noble effort. It never really got off the ground, but it's something that I still see as being desperately needed. The law does not provide, either, for the basic kind of direction or authority necessary for fiscal responsibility. It should be required that research be conducted in the proposal development process, if innovation is the goal, to determine whether or not similar projects are being attempted. Elimination of such duplication would save considerable dollars and personnel time. For example, the Chicago Regional Office of Education, under the leadership of Mr. Gil Moran, conducted a similar review in the cooperative educational grant program, and exacted estimated savings of over $300,000 for his program. A simple way to start on this might be ERIC computer searches, which could be built into the project proposal as a requirement. Monies could also be allocated at so many dollars per category for curriculum development pre-service and in-service education, mass media and so on, as was indicated before.

Another extremely important addition should be incorporated into the Act and this may not be the domain of the Act, I don't know, but it's in relation to revenue sharing, when, in effect, you are telling the people in the state they have to get the money locally. O.K. That may be a worthwhile goal. But this means an entirely new institutional arrangement for these people. So, from where is the money going to come? How do they get a piece of revenue sharing, for example? A question you may want to address

yourselves to is: exactly what should be the role of the federal government in helping that process? Maybe it's matching monies in some areas, I don't know. This is something I think you should look at very carefully. This would be in addition to and in a different direction from the federal/local sharing already indicated in the Act, which is designed to insure project longevity. Finally, the last comment I'd like to make concerns the dissemination of education materials. This, I understand, is being designated as a function of the National Institute of Education (NIE). Since NIE will do this for the Office of Education, it should be clearly specified in the new Act that NIE will carry out its function for environmental education and should be supported to do so.

NANCY AYERS, Susquehanna Environmental Education Association: I just wanted to add a footnote. From my observations it is critically important that we consider what Bob and Chuck were talking about and that is, that we can't ever expect the funding to come from one place in perpetuity. I hate to use the term "scrounge" but I suspect that's an art that educators know better than, or as well as, anybody else. There are times when, if you can simply demonstrate the feasibility of a particular program or a particular publication, you can then pick up support for it which you didn't have before. I think the kids call it "show and tell" in the kindergarten.

I respectfully submit that this is rather an important way of going about it. For example, a very small and modest example; we couldn't get the "feds" to pay any attention when we said we wanted an environmental education bibliography that was sort of general in nature and could be used for a variety of audiences. So we bootlegged it through the Department of Environmental Conservation in New York, who just happened to have a state magazine and who just happened to have the space and we just happened to volunteer to put it together for them. As a result we are now at the point where, I think, we have pretty strong support in New York for introducing state legislation, which may begin to pick up some of the slack. One of the things we are proposing is a small grants program that specifically would get at this problem of doing something for the first time, of that "show and tell" aspect. So I think we have got two things here that are very important. We need to be able to substantiate that a lot of this stuff is already being done.

You know, you have heard some of the things this afternoon, but there are lots of others. If we could demonstrate by just simply cataloging, if you will, many of

these kinds of activities that are going on in the states, then we would tend, I think, to reinforce the whole basic need for environmental education, and the fact that everybody is not expecting Uncle Sam to do it all, or do it forever.

But the second thing that I hear you all saying, and which, I think, is the most important thing this afternoon, is that almost every time you open your mouth you are basically suggesting a modification to the Environmental Education Act itself. . .and particularly when hearings are probably going to come up within approximately four to six weeks. It seems to me that the most important thing for us to do here and now or in that remaining time is to zero in on what specific changes need to be made in this Act in order to make it more functional than it has been the last three years. I'm not sure that it can be done, but I would like to make a try at it.

ROBERT CAHN, Christian Science Monitor: I just wanted to elaborate or correct a little in Dr. Roth's thing about the federal coordination. Dr. Gilkey didn't suggest this. This was an idea at CEQ we tried to do on an ad hoc basis; getting, as Jim Aldrich will know, the people from various agencies to come in, and we even got OMB to come over and sit in on this. The upshot, after about three meetings -- I am sorry Warren Muir isn't here, because he was trying to carry it on after I left -- was that no one in the federal government wanted to take on environmental education. The National Park Service and through their then youth activities was a possibility, especially if they were going to be the Department of Natural Resources. EPA had a lot of money in their budget for environmental education, and it turned out to be all public affairs money and none for environmental education. Mr. Ruckelshaus has still not decided. He has a good head for environmental education but it has no funds and no organization. But maybe, if you are going to attack a new concept of environmental education (I mean a new bill) and still want to keep it under the jurisdiction of the present committee, it could be that there's some way, through legislation, to force OE into this coordinating role, and write the legislation. Maybe it won't be obeyed, but at least there might be a try to see if they could be given this power in an Act to do this coordinating. Otherwise, I don't think anybody's going to take it up.

ROBERT COOK, Alliance for Environmental Education, Inc.: Looking at the Office of Environmental Education and the Environmental Education Act, I have heard a lot of comments on it, but I'm still not sure what the overall purpose of both the Act and the Office are. One of the weaknesses that I keep hearing is the lack of money, but there are things happening that do not have federal money and are not sponsored by the Office of Environmental Education. The Foundation's, or, rather the Aldrich/Kormondy report entitled "Environmental Education: Academia's Response" outlined a number of environmental studies programs in higher education that are in effect now, and they have quite a variety of forms in four-year institutions. Last December, at Green Bay, building on that study, we brought together representatives from colleges and universities who have environmental studies programs in effect right now, and got these people to sit down and share their experience and put these together into a format that could be used by institutions that have existing programs, upgrading their programs, but more importantly, being used as a guide to other colleges and universities who want to start programs. We had to restrict this conference to institutions, or people from institutions that had a program because they had the experience we wanted them to bring in and share. But we had phone calls you wouldn't believe from people who wanted to come and observe because they were going to put some type of a program into their college or university and they wanted to know how it was going to happen. I don't think there are very many federal dollars involved in any of the studies that you turned up, and I'm not sure how many of the programs that were represented at UWGB were supported with federal dollars. I think most of these grew from individuals within higher education who are dedicated individuals and wanted to see it happen and they were the catalytic force that brought it about. I think this is going on without the Office of Environmental Education.

Now, what is the role of the Office? Is it going to be successful if it gets $30 million or $80 million? I don't think it will, if it doesn't sharpen up its focus and purpose for being. I think that's one of the things that we have to look at quite critically. It's trying to do everything out there now.

ROBERT ROTH, Ohio State University: If I may respond to that very briefly. One of the concerns that came out of our last round of regional meetings with the state's supervisors, was really defining or a list, let's say, of the behavioral objectives of environmental education. Now you realize immediately what they are asking. They are asking for this precise kind of definition. What is it that we are all about? So that we can measure when we get there. So you have cost accounting and all the rest of that, which is now being instituted in many of the departments of education across the country. That's going to be important. It's going to have to be there in some way or another. And just to reinforce your point regarding the fact, there are a lot of programs that are not federally funded. This new document, "Directory of Projects and Programs at the Elementary and Secondary Level" that we just put out, probably has less than one-third that are federally funded, and there are over three hundred in here. That's not exhaustive, but it is simply those that responded to the questionnaires.

GEORGE O'HEARN, University of Wisconsin, Green Bay: I hear several people saying much the same thing. The message I'm getting is that the Act, as it is presently written, generally promises to be all things to all people, and it is being criticized because it has failed. It has made various groups mad. Higher education is mad because we haven't gotten a fair shake. Yet other groups are mad because higher education has got too much, and on down the line. Then we ask what is the substance of the proposals? I, too, have read some of the proposals and share your reaction. There's been a fantastic lack of substance. Now, with that criticism, I heard a suggestion from Bob Roth a few minutes ago that bears repeating. The new Act, no matter where it's located, will be successful only to the extent to which it is more properly focussed. If we are going to put money into the formal education area, let us pigeon-hole it, let us say that this is one of the directives of the Act, to assist formal education. Perhaps further breakdown within that category is appropriate. If we are going to assist non-formal education, the community groups, let us be specific about that. It may be that it is administratively impossible for the Office of Education to manage both of these. Maybe we are talking about separate acts. One for formal education through the Office of Environmental Education, or NIE, and I won't even hazard a guess where the non-formal education could go.

GEORGE ALDERSON, Friends of the Earth: It seems to me that some of these considerations will have to be worked out in consultation with our main supporters on the Subcommittee. Is there a way, either through the Alliance for Environmental Education, or by setting up some ad hoc working committee, here in Washington, to follow up on this so that we would be able to make sure that this meeting is a beginning, rather than the end, of these considerations. I think there are many of us here in town that can do a great deal after this. Linda Billings, from the Sierra Club, said that they want to help lobby on this. Friends of the Earth certainly does. I know that Bicky has been working on this, and many other groups. I think that one of the things that I would like to see come out of this meeting is a little bit on what the Alliance is prepared to do and how the others of us can tie in here in a working group after this meeting.

ROBERT HOWE, ERIC Center for Science, Math and Environmental Education: Jim, I would like to suggest perhaps two things. One that I think there is need for more reaction from people that have been here at this forum other than what we are going to get from people just reacting verbally. A lot of people have things to add which can also be fed to an ad hoc group. So I would like to recommend to anybody who's been here that, if they have ideas regarding the bill, they ought to communicate this to this ad hoc group. This would be a chance for each person that has been here, at least who want to, to give their ideas in more detail. I think we have been limited in the time we have had to discuss things and present ideas.

JAMES ALDRICH, Conservation Foundation: I hope we can set up a frame of reference for positive suggestions about what might be done. We all have points of view and a vested interest in presenting them.

NANCY AYERS, Susquehanna Environmental Education Association: Well, if I could be a little simplistic, I might suggest the people in Washington are the best people to be on the ad hoc group.

GEORGE ALDERSON: What does the Alliance see as its role in this? Will it be able to lobby or. . .?

BICKLEIGH DODGE, Zero Population Growth: Will it even be formally constituted in time to do anything?

ROBERT COOK: It will not be formally constituted and it will not be a lobbying group. It will be a group that will have as a primary objective gathering and circulating information on a short, rapid basis, where it would be effectively distributed to a large number of people. I would like to recommend that Jim Aldrich be a chairman, to convene a committee to plan the next steps and keep this ball rolling. I think you've had a wonderful start here. I think we have motion built up that ought to be kept up. . .

ROBERT ROTH: Since you are here and will know what the schedules for hearings will be, would you take the responsibility for letting us that are out in the boondocks in the Midwest and so forth, know when the hearings are being held so that we could get in here and help testify?

JAMES ALDRICH: Well, I think that's a reasonable extension of what we started here and I would certainly try to pick up that. We have the problems that Syd Howe mentioned at the very beginning, that we purvey information and cannot lobby for legislation, but within that context we will certainly want to pick up and follow up on any thing we can do.

RICHARD MYSHAK, Minnesota Environmental Sciences Foundation: Jim, I'd like to concur with the recommendation that you be the homebase. Jim is also on the steering committee of the Alliance. He can bring together a number of forces. In case some of you don't know it, even though the Alliance hasn't met to ratify a constitution and by-laws and what have you, eleven organizations. . .

ROBERT COOK: Thirteen.

RICHARD MYSHAK: Well, these organizations have more than a total membership of 10,523,004. Boy Scouts or Girl Scouts I'm sure make up a big membership, but this is what we are talking about.

ROBERT COOK: Could I ask the question: has there been any group that has set down and analyzed the past three years of the Office of Environmental Education and come up with some kind of a report on positive aspects and negative aspects and future recommendations? It seems to me I hear things back and forth, but I have never heard anyone that has sat down and tried to really look at it in that analytical way. Before that's done I don't see how we can start looking ahead and plan for the future.

ROBERT HOWE: Well, Bob, I think many people have analyzed it from their own perspective and contact with it. I think that there would be a number of people who could give a report here and get at some varying things based on their contact with it. What Bob presented in part is some of our observations having worked with it over the last three years, very closely with it, on many projects, some of the problems that we perceived in working with it too and there are problems. There are also some positive points and you can point those out too, but I think if people can share these together so that some committee can pool the different perceptions of positive and negative points of view you might then come up with a better feeling of what these really are. I think most everyone is going to have some similar type thing. So, I'd respond, yes, we have analyzed it very carefully through our point of view.

ROBERT COOK: Others have done the same, but they have never been put together into a comprehensive statement. The state coordinators that Bob mentioned -- we have met with over 47 of the 50 state environmental education coordinators in the last three years. We tried to get feed-back from them; what they wanted and things that they were also satisfied with. So we have a fairly good wealth of information that came through that. That's another strong group that if people would use them properly they could also rally a lot of support, in my judgement. I think they have been left out a lot.

DENNIS BREZINA, George Washington University: Just a couple of points and then I'm finished. It seems like any strategy that's developed has to be flexible and should have fall-back provisions, and all that. I certainly agree with most of what has been said here, particularly that you don't want just more and more funds and that you have to define what you want. There is some latent interest, at least in the Senate Interior Committee, over the environmental study areas type of approach. If that were tapped at the right place at the right time, we might be able to go somewhere. One of the original ideas that were kicking around a couple of years ago was that we try to get some protective amendment to the Water Quality Act, which would allow environmental education funds for EPA specifically set aside. Now we are going into the Air Quality Act, Congress is, I don't know what their timetable is but again, there might be some friends we would want to look for, for EPA getting involved. I have been told on good information that underneath in the organic OE legislation there is a loophole that says in so many words that in the case of OEE the Act will not expire June 30th this year -- it has an automatic one-year extension. So, in that context, one might think about the fact that if hearings are held on the House side, which looks very hopeful they will be, the possibilities of getting the Bill through are much more difficult. Hearings on the Senate side means conference, double vote, and all that, but that might set up the possibilities for action trying to amend the appropriations bill, keeping them going for a year or two until you can mobilize your forces more strongly. The hearings Mr. Brademas will hold would serve to set some tone as to what changes in the administration of the Act might be called for. In three years they will have to look at that Act again and say, well, we had better tighten here or do this or do that. There are just three areas that people might think about in terms of focussing the energy for basically a fall-back position.

RICHARD MYSHAK: What about the funding aspect, now that the request for funding for next year for the Act has gone in?

DENNIS BREZINA: You could try amending the appropriations bill in Congress and this would help. Funding came in the first place through Congressional initiative.

ROBERT CAHN, Christian Science Monitor: It would be much more difficult to do that without a specific authorization act. I can't imagine, with the reluctance of the dministration to put it in the budget, that even if an addition were put in an appropriations bill, there would be anything better than a remote chance of them spending it.

DOUGLAS LAPP, Fairfax County Schools, Virginia: Has anyone ever pushed Common Cause to see what their position is on this or whether they would take a position on this? See if there is some agency that can lobby and could take on that.

ROBERT CAHN: I've talked to John Gardner previously, not on education but on environment issues. He just doesn't seem to feel that that's a priority for him. He takes a lot of interest, but he's never been willing to give this a high priority, let alone environmental education.

DOUGLAS LAPP: Does the legislation for NIE allow any kind of scope that would allow this kind of program to be placed under it? -- because then it would still come under the education subcommittee.

ROBERT HOWE, ERIC Center for Science, Math and Environmental Education: Not all of it could be, but a number of parts of it could.

DOUGLAS LAPP: I mean, it is a smaller shop and there might be more interest in responsibly directing the program in a positive way.

ROBERT HOWE: I think the direction of NIE isn't perfectly clear. Our ERIC operations are within NIE, and I'm not sure that NIE has worked out its direction entirely yet either. But I think some of the things that could fall in there, but there would be problems for others.

ROBERT CAHN: Inasmuch as there's a lot of commitment of funds already to revenue sharing, is there a way of making

an effort towards the governors and the cities. I guess it's mostly states from which funds will have to be committed under revenue sharing. Can we make any recommendations to see what can be done this way?

LINDA LEE, National Advisory Council for Environmental Education: Except the problem with that is only under general revenue sharing could they use it. So you would have to wait until you got special revenue sharing for education and the cities, and then you are back to the question of environmental education competing with libraries, and elementary and secondary education and everybody else for those funds. At this point the special revenue sharing legislation hasn't even been sent up to the Hill.

ROBERT CAHN: I was thinking more of the special revenue sharing.

LINDA LEE: That's what you have to have because in general there just isn't enough there and it can't be used for education anyway.

CHARLES ROTH, Massachusetts Audubon Society: But I think you have got to start that battle. As I have said to the people in our area, it isn't a case of whether you agree with it politically or not. You had better figure out practically how you get your hands on it and get the work done. Because we are going to have to compete. If we believe in what we're doing we're just going to have to fight some other interest to get ourselves in there.

SALVATORE NATOLI, Association of American Geographers: It may seem so obvious, but I think one of the reasons why we can't let the current Administration off the hook on this is that we are all very much interested in the environmental problem and environmental education, regardless of what other responses we might get locally. If we understand the environmental problem and the environment, it is something that goes beyond states. It is a national problem, if my understanding of the ecosystem is correct. Consider the difficulties you have in just getting interstate cooperation on something. That's why I feel it is so necessary to maintain a national focus consistent with our philosophy of the environment. Once you've lost this, then I think you've lost the whole point. I think this is the most important reason why pressure needs to be maintained at the federal level.

CHARLES ROTH: I think it also has had a beneficial effect at the state level. Until it became a national law we had a great deal more difficulty talking to the people at the state level. If it gets lost from the federal level, we will have lost a lever on doing our work back in the states. That has been a very strong talking point in dealing with it, because it was given that higher priority, whereas before it was "those kooks and their crazy ideas, trying to push it on us."

ROBERT COOK, Alliance for Environmental Education, Inc.: Many of the states' environmental education plans are only put together because you had to have a state plan before you could apply for the Environmental Education Act funds. Well, it hasn't come about yet, but this has been the catalyst that has got those plans going. Without that, they would never have gone.

ALLEN SCHMEIDER, U.S. Office of Education: I just have two points. The first one relates to the Office of Education, which I have been in for eight years. Part of the perspective that hasn't been provided this afternoon, I think, relates to where the Office was when environmental education was introduced into the Office. There has been considerable evidence that categorical programs, small programs, weren't making much difference. I am trying to describe what evaluations said, not what I believe, because those evaluations wiped out about seven or eight of my own programs and they were all beautiful, exciting programs. So I don't necessarily agree with the evidence. But the point is that environmental education came in just at the time that people were trying to find ways to impact upon the system more effectively. We were literally pouring millions of dollars into some disciplines. There was no change that we could see. And so, as you know, we were talking about something called education renewal. In other words, what we were trying to do was to find ways to really make a difference, you know, at the seat of power, or wherever it was that you got a multiplier effect. The evidence generally seemed to be that you could put $50 million a year into environmental education in the way that we are putting money into institutes, and other things, and not make any difference at all. There had to be a more effective way to use the money in terms of getting at the guts of how you did change and reform schooling. So I don't think there was any intent on the part of the people in the Office of Education (I was working very closely with that program) in watering down the program or any disfavor toward

environmental education. It takes quite a while for those things to begin to settle in. The Right to Read program, you know -- I was head of that commission for a while -- we were talking about putting things on cereal boxes because we didn't have any money. Well, it took about three or four years, and, bam, you know, the thing suddenly hit! They were trying to convince everybody to get into it and that was a much more saleable thing than environment at the time. So I just want to make the point that, it's not so much by way of saying that we are better guys than it sounded as if we were today, at all; it's to try to make the point that people who are looking at how you change education are looking at a lot of different things. I think you people have to be very concerned about that, too, if you want to make a difference.

The second point that I want to make is equally complex, and may be another one that you can't really get hold of. And that is that a very large number of people are now questioning the whole nature of schooling. I am making that point because, if we think about environmental education as an add-on, we are probably going to lose too. Most of the current thinkers are sort of saying that maybe the schools have been asked to do too much. They are beginning to talk about all the human support systems and they are really trying to get at the whole guts of the nature of life. How many of you, for example, when you hear people say that what kids most need is computational skills and communicational skills, jump up and say "Hogwash!"? Because that is a widely accepted thing on the part of educational leaders, and national leaders, and political leaders. I think that that is the kind of thing we have to begin to get at, if we really want to make a difference in environmental education -- because I think the whole question of values is now up for grabs and the whole relationship with schooling for values is regarded as up for grabs. More and more people are asking: what are the fundamental skills we want from schools? And I think we are about to have five or six years where people talk about the computational and communicational skills without talking about values.

I think that this meeting is a very positive thing. I am a geographer and very concerned about the environment. I don't want you, and I know you won't anyway, to have any less passion in terms of what you fight for because there is a lot of evidence in the past that showed that what people have fought for -- in drug education and special education

and in other areas -- have succeeded. Now, I am not suggesting that you diminish at all; I am just suggesting that you take a look at the more complex kind of game of how you use federal funds to make a difference (or any kind of funds, for that matter). Take a look at the state level. If most of the funds are going to flow to the state level, for example, can we have a model of state influence so that it just doesn't go to the state level and block all those figures we were talking about, without having some check or monitor on it.

JAMES ALDRICH, Conservation Foundation: Bicky, do you want to wind us up here?

BICKLEIGH DODGE, Zero Population Growth: Well, all right. I just want to respond to that as an environmentalist. How you use federal funds to make a difference depends, partly, on what you may want to make a difference in. I think educational reform is an important concern in its own right. I do not believe it should be the primary goal of this legislation, and I am speaking not as an educator, and so the educators here may not agree with me. But, I would like to remind us that this legislation was passed in response to a social need, that is, a perceived environmental protection need, rather than primarily in response to an educational need, and that its primary goal with the small amount of money it has is to impart environmental skills and environmental concepts and if you lay the goal of having to reform the educational system on top of it, it's a pretty heavy burden for it to carry.

ROBERT ROTH, Ohio State University: I would like to counter that just by stipulating something. I can't let you get away with that entirely!

BICKLEIGH DODGE: O.K., educator!

ROBERT ROTH: It is continuum that we are dealing with.

BICKLEIGH DODGE: I agree. Both are important.

ROBERT ROTH: But you do have to target in on these various audiences all along that continuum.

BICKLEIGH DODGE: I'm just afraid that we have lost sight of its primary goal, that is, to equip people with environmental skills and concepts.

ROBERT ROTH: Yes, so that we can continue to live on this "Spaceship Earth."

ALLEN SCHMEIDER: Yes, but I think that one question, Bicky, that you might have misunderstood, is that if you want that to happen, then, how do you make it happen with $3 million? That's all I'm talking about. I'm not suggesting that you've got to reform the system, but that you probably will have to do some things differently than were done before. I don't know whether you can call it reform or change, if you are ever going to make a difference in a $70 billion enterprise with $3 million.

CHARLES ROTH, Massachusetts Audubon Society: I think you also ought to keep that in mind when you are talking about a reform of schooling, because the very things that you are trying to do or talk about, I think, have to be refined. The real question in a lot of our minds in the education world is: is schooling the mechanism? And I think the answer is clearly no. There are many other mechanisms and we have been trying to force more and more things into a schooling mechanism, which it cannot handle. It's time we went back and used the educational system and not just the schooling system.

ROBERT ROTH: There are some things schools can do and some things they can't do. And that's what we have to keep in mind.

JAMES ALDRICH: Sounds like a safe rebuttal and a good note to close on. We shall try to prepare a transcript of the whole proceeding and distill out some pieces that we can take hold of. I welcome any help in following up on this session.

I appreciate very much all of you coming; those of you who came across town and all of you who came across country. Thank you again.

ENVIRONMENTAL EDUCATION FROM THE FIELD:

Two Surveys by Friends of the Earth

Environmental education has been a longstanding issue in FOE's legislative portfolio. In the belief that a federal effort was needed to launch an effective national program of environmental education, we supported the passage of P.L. 91-516, the Environmental Education Act of 1970, and we have subsequently urged increased support of its grants program.

As part of our activity in monitoring the federal environmental education program, FOE has conducted two annual surveys of P.L. 91-516 grantees. The primary thrust of these surveys was to collect more specific information about the content of local projects than was available from the Washington-based Office of Environmental Education (O.E.E.), and to elicit grantees' experience with the program from the local perspective. An additional objective was to help us document the case for a continued and expanded program.

The surveys consisted of a simple questionnaire accompanied by a cover letter explaining FOE's interest in the program and requesting the assistance of the grantee in supplying the information. Four questions (1-4) were identical in 1971 and 1972; two additional questions (5-6) were added in 1972. Both provided space for additional comments. A sample of the 1972 questionnaire is attached.

Table 1.

	1971	1972
Number of P.L. 91-516 grantees	74	162
Number of respondents	42	93
Per cent of grantees responding	56.8	57.4

Although respondents were requried to supply their own envelopes and postage in returning the completed questionnaires, the response was high, as indicated in Table 1.

Table 2.

		1971	1972
Grant award as percentage of total request		76.4	67.4
Other sources of assistance	yes	13.7	19.4
	no	86.3	78.7
	n/r		1.9
Would have made larger request if funds available	yes	83.3	62.4
	no	16.7	36.7
	n/r		0.9

The first three questions, summarized in Table 2, elicited information about the adequacy of federal funding from the standpoint of environmental educators in the field. Approved grants were funded at about three-fourths of the requested level in 1971; in 1972 that figure dropped to about two-thirds. In 1972, more grantees were receiving other sources of assistance than in 1971, but in both years, most grantees were receiving no assistance other than from P.L. 91-516.

A large percentage of respondents in both years indicated that they would have made larger fund requests had more federal funds been available. One grantee noted, "We could have used effectively ten times the funding granted." The overwhelming positive response to this question in 1971, however, dropped considerably in 1972. This drop may suggest disillusionment on the part of some environmental educators. Low appropriations and bureaucratic hostility toward the program may have created pessimism about the prospects for an expanded federal effort in environmental education.

Table 3.

	1971 #	1971 %	1972 #	1972 %
No breakdown	9	21.4	19	20.4
Breakdown	33	78.6	74	79.6
Population		5.2		8.0
Pollution		23.2		21.9
Resources Allocation & Depletion		11.4		8.2
Conservation		11.3		13.6
Transportation		3.3		3.5
Technology		3.7		3.3
Urban and Rural Planning		14.0		11.0
Other		26.6		29.2

Respondents were asked to estimate by percentage the emphasis accorded to each of the seven areas of environmental concern specified in the legislative definition of environmental education. If the project also devoted attention to other subject areas we asked respondents to specify that additional substantive focus.

Table 3 indicates the distribution of responses. There was a high level of "no response" to this question. Percentages devoted to each subject area were calculated on the basis of those who did respond with a breakdown of subject focus.

Of the seven environmental areas specified in P.L. 91-516, the greatest focus was on pollution in both years. Urban and rural planning was second and conservation third in 1971; their order was reversed in 1972. None of the other four subject areas -- population, resources, transportation and technology -- received more than 8.2% of grant funds in 1972, and at least 44% of all respondents devoted no resources at all to any of these areas. This finding is surprising, for example in the area of population. Former U.S. Education Commissioner Allen, in early hearings on the Environmental Education Act, testified that he expected most projects to contain population components.

In fact, the responses indicate a higher focus on other subject areas not specifically mandated by P.L. 91-516 than on any of those targeted in the legislative definition. Explanatory comments indicated activity ranging from "horticulture" to "self motivation and the importance of personal power for determining environmental choices."

It was difficult to ascertain from some of the explanations what exactly was the subject being stressed: "Equitable distribution of environmental costs and benefits," for example, or "Personal family values as they affect environmental problems." Other answers described how whatever the subjects stressed were to be approached, rather than what those subjects were, for example:

"Emphasis on developing techniques for participation by citizens and specialists. . .in creating an improved environment;"

"Educating students as future adults to make wise decisions in regard to their environment;"

"Our approach is a total environment treatment;"

"Total integrated systems view of all the above."

One respondent actually denied that any environmental content would be part of the project: "It has a process rather than a content or issue orientation."

Over 20% of all respondents gave no breakdown of subject focus. Grantees developing state environmental education plans found it difficult to do so, as did others who claimed to be dealing with "all of the above." Some respondents indicated the students would choose their own particular environmental topics for study. One said, "Will deal in this general area." And one admitted, "No specific orientation at this time," a surprising comment to be written in December, nearly halfway into the grant period.

The marked lack of specificity of responses to the question about projects' environmental content is consistent with grantees' view of O.E.E.'s philosophical emphasis. Question 6 in the 1972 questionnaire elicited grantees'

perceptions as to the relative weight given by the Office to educational process as compared with environmental content. While over half felt both were given equal weight, or had had too little contact with the Office to judge, 41.7% indicated a bias in favor of "process," while only 5% felt content to be stressed over process.

Table 4.

		1972 only #	1972 only %
Adequate access to O.E.E. assistance	yes	61	72.6
	no	23	17.7
	n/r	9	9.7

Table 4 summarizes the response to Question 5 in the 1972 questionnaire. A high level of satisfaction with O.E.E.'s technical assistance is evident. When difficulties were expressed, they were frequently attributed to shortage of staff and other extra-O.E.E. forces, for example, "O.E.E. staff under-manned, but assistance is unique and greatly appreciated." Of course, grantees may have been understandably reluctant to criticize their funding agency.

In the space provided for general remarks, comments about the inadequacy of appropriated funds to do the job were frequent. A more global despondency about our national fiscal priorities was reflected in one comment: "One penny per citizen for the environment, one dollar per citizen to arm Cambodian troops."

1. What per cent of your project's grant request was actually funded by the Office of Education? _____%

2. Is it probable that your project would have made a larger request had more federal environmental education funds been appropriated? yes_____
no_____

3. Is your project receiving federal assistance under any authorization other than P.L. 91-516? yes_____
no_____

4. Please estimate your project's degree of orientation toward each of the following subject areas:

   a. population _____%
   b. pollution _____%
   c. resource allocation and depletion _____%
   d. conservation _____%
   e. transportation _____%
   f. technology _____%
   g. urban and rural planning _____%
   h. other _____%

   Specify:

5. Do you feel that you had adequate access to assistance from the Office of Environmental Education in preparing your grant request? yes_____
no_____

6. In your contacts with the Office, what is your impression of the relative emphasis accorded to educational process as compared with environmental content?

   a. process stressed, content definitely secondary _____
   b. content stressed, process definitely secondary _____
   c. both stressed about equally _____

Remarks:

OEE ANNOUNCES FY '73 GRANTEES

The recently released Office of Environmental Education (OEE) list of Fiscal Year 1973 grantees shows approximately $1.131 million allocated to 53 projects in 32 states and the District of Columbia.

In 1972, $2.999 million was distributed among 162 projects in all 50 states, Puerto Rico and the U.S. Territories.

Regions III and IV received nearly 50 percent of the total grant outlay with a combined figure of $561,168 for 21 projects. The two largest grants were awarded in these regions. The Cleveland, Ohio, Institute for Environmental Education acquired $64,000 for personnel development connected with plans to expand the Cuyahoga Watershed Project into Cuyahoga Heritage and disseminate their model to other watershed and heritage projects.

Three groups in Pennsylvania received two grants amounting to $99,000. The Luzerne-Lackawanna Environmental Council was awarded the second largest grant of $50,000 to work together with the Public Broadcasting Center of Northeastern Pennsylvania bringing environmental education to the schools and community through tested ee materials. The Center and the Northeastern Television Association received a $49,000 grant to have WVIA TV, Channel 44 work jointly with the Council to develop a national demonstration project which will illustrate how nonformal educational institutions and groups can facilitate the introduction of environmental education concepts into elementary, secondary and college level systems.

Of the 38 major grants, 16 went for resource materials development, 12 for personnel development, seven for community education projects, two for elementary and secondary education and one for curriculum development.

OEE also awarded $113,202 in mini-grants, ranging from $1,010 to $10,000. The majority of these are to be used to finance a variety of workshops.

OEE also announced the signing of a $46,843 contract with Kirkwood Community College. In cooperation with the University of California, Kirkwood will complete a junior high through college career-oriented curriculum in the field of integrated pest control. The curriculum will emphasize environmental studies as well as more substantive subject matter on pest control. The contract was awarded as a result of an OEE Request for Proposal (RFP).

CATEGORICAL DISTRIBUTION

Recipients	No. of Grants	Grant Type	Grant Totals
Universities/Colleges	16	pd/md/ce/cd	$409,700
Private Organizations	18	pd/md/mg/cd/ce	$337,017
School Systems/School Boards	6	md/ce/mg/es/pd	$125,021
Local and Regional Councils, Districts and Commissions	5	md/pd/ce	$ 83,193
State Depts. of Educ.	3	pd/md/mg	$ 77,313
Media Association	1	pd	$ 49,000
Unions	1	pd	$ 24,771
Individual Elem. or Sec. Schools	2	pd/mg	$ 18,327
Indiv. Watershed Projects	1	mg	$ 6,860
Totals	53		$1,131,282

es—elementary and secondary educ. cd—curriculum development
ce—community education mg—minigrants
md—materials development pd—personnel development

REGIONAL DISTRIBUTION

Region	No. of Grants	Total $	% of '73 total	% of '72 total
Region I – *Connecticut*, Maine, Mass., *New Hampshire, Rhode Island* and *Vermont*	4	$51,206	4.5%	10.3%
Region II – *New York, New Jersey*, Puerto Rico and the Virgin Islands	5	$70,156	6.2%	9.4%
Region III – *Delaware, D.C., Maryland, Pa., Virginia*, and W. Virginia	9	$260,868	23.0%	12.1%
Region IV – *Ala., Fla.*, Ga., Ky., Miss., N.C., S.C., and Tenn.	5	$111,668	9.8%	12.6%
Region V – *Ill., Ind., Minn., Mich., Ohio* and *Wisc.*	12	$300,210	26.5%	17.0%
Region VI – *Ark.*, La., *N.M., Okla.* and *Tex.*	4	$97,677	8.6%	8.4%
Region VII – *Iowa*, Kansas, *Missouri* and Nebraska	4	$62,479	5.5%	3.2%
Region VIII – Colo., *Mont.*, N.D., S.D., Utah and *Wyo.*	2	$17,824	1.6%	8.9%
Region IX – Ariz., *Calif., Hawaii*, Nev. and U.S. Territories	2	$34,600	3.1%	9.7%
Region X – *Alaska, Idaho, Ore.*, and *Washington*	6	$124,604	11.0%	8.3%
Total	53	$1,131,282	99.7%	99.9%

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THE ENVIRONMENTAL EDUCATION ACT:

A Brief Chronology

1970	August 3	Environmental Education Bill passed House -- 289-28
	September 21	Considered and passed Senate -- 64-0
	October 30	Environmental Education Act of 1970 (P.L. 91-516) signed by President Nixon
1971	October 28	Oversight hearings by the House Select Subcommittee on Education on the administration of the Act
1972	April 17	Oversight hearings by the House Select Subcommittee on Education on the administration of the Act
1973	February 7	H.R. 3927 introduced to extend the Environmental Education Act for three years
	April 18	S. 1647 introduced to extend the Environmental Education Act for three years
	July 26	H.R. 3927 favorably reported out of the Committee on Education and Labor

	PROPOSALS	GRANTS	AUTHORIZATION	APPROPRIATION	GRANTED
1971	1925	74	$5,000,000	$2,000,000	$1,725,000
1972	1650	162	$15,000,000	$3,514,000	$2,999,040
1973	1130	54	$25,000,000	$3,180,000	$1,143,185*
TOTALS	4705	290	$45,000,000	$8,694,000	$5,867,225

* Approximately $2 million was lost from OEE's 1973 budget because of alleged illegal backdating of 1972 grants.

Environmental Education Act of 1970

(P.L. 91-516)

-- 1969-1973 --

The Purpose of the Environmental Education Act:

To authorize the United States Commissioner of Education to establish education programs to encourage understanding of policies, and support of activities, designed to enhance environmental quality and maintain ecological balance.

Congressional Rationale and Purpose for Environmental Education Act:

STATEMENT OF FINDINGS AND PURPOSE

Sec. 2. (a) The Congress of the United States finds that the deterioration of the quality of the Nation's environment and of its ecological balance poses a serious threat to the strength and vitality of the people of the Nation and is in part due to poor understanding of the Nation's environment and of the need for ecological balance; that presently there do not exist adequate resources for educating and informing citizens in these areas, and that concerted efforts in educating citizens about environmental quality and ecological balance are therefore necessary.

(b) It is the purpose of this Act to encourage and support the development of new and improved curricula to encourage understanding of policies, and support of activities designed to enhance environmental quality and maintain ecological balance; to demonstrate the use of such curricula in model educational programs and to evaluate the effectiveness thereof; to provide support for the initiation and maintenance of programs in environmental education at the elementary and secondary levels; to disseminate curricular materials and other information for use in educational programs throughout the Nation; to provide training programs for teachers, other educational personnel, public service personnel, and community, labor, and industrial and business leaders and employees.

and government employees at State, Federal, and local levels; to provide for community education programs on preserving and enhancing environmental quality and maintaining ecological balance; and to provide for the preparation and distribution of materials by mass media in dealing with the environment and ecology.

What is Environmental Education Anyway?

The Environmental Education Handbook, prepared by the U.S. Office of Environmental Education, USOE/DHEW defines it as follows based on the definition of the Environmental Education Act.

Environmental education is the process that fosters greater understanding of society's environmental problems and also the processes of environmental problem-solving and decision-making. This is accomplished by teaching the ecological relationships and principles that underlie these problems and showing the nature of the possible alternative approaches and solutions.

That is, the process of environmental education helps the learner perceive and understand environmental principles and problems, and enables him to identify and evaluate the possible alternative solutions to these problems and assess their benefits and risks. It involves the development of skills and insights needed to understand the structure, requirements, and impact of interactions within and among various environmental entities, subsystems, and systems.

The term "environmental education" means the educational process dealing with man's relationship with his natural and man-made surroundings, and includes the relation of population, pollution, resource allocation and depletion, conservation, transportation, technology, and urban and rural planning to the total human environment. (From the Environmental Education Act of 1970.)

That is, environmental education is the process of inquiry into both the specific and general environmental implications of human activities viewed from the perspective of social needs and values as they relate to general public policy.

Recommendation of the Advisory Council on
Environmental Education in its Second Annual Report
March 1973

The importance of environmental education has been underlined by numerous governmental agencies, advisory committees and private groups. In its 1972 report to the President, for example, the Citizens' Advisory Committee on Environmental Quality stated that '. . .the quality and accessibility of environmental education in this country. . .must reach citizens of all ages, encompass numerous academic and technical disciplines, and utilize the broadest possible range of formal and informal educational settings. . . .'

Due to the failure of the Office of Education to provide the Office of Environmental Education with staff, physical facilities and administrative support, the beginning of the program was delayed for nearly a year after its enactment. In the course of its discussions with recipients, examination of project reports and personal visits to ongoing projects, the Council finds that although there are many outstanding projects underway, these first three years cannot be considered a fair trial of the Congressional mandate. It is unrealistic to think that an environmentally aware public or an environmentally sensitized student population can be achieved in three years (or even six) with only $7.2 million (estimated) in direct funding. The need is too great and public interest too high to abandon the effort now. The program should be continued.

Extending the Environmental Education Act*

Unmet needs

Quite apart from these philosophical arguments, with which the Committee concurs, the Committee notes that underfunding of the environmental education program has meant that the Office of Environmental Education has not been able to meet the broad mandate contained in the Environmental Education Act.

As already noted, the Office has been able to fund less than 300 projects at a total cost, over three years, of approximately $5.843 million.

Yet fully to implement the Office's mandate would require:

The development of curriculum prototypes at every level of education from pre-school through continuing education;
The dissemination of these models throughout the Nation;
Extensive training programs for educational personnel as well as public service personnel, and government employees and business, labor, and industrial leaders and employees;
The planning and development of outdoor ecological study centers;
Community education programs for adults;
The development, preparation, and distribution of materials on the environment suitable for use by the mass media.

The Committee notes as well that the Office of Environmental Education should: (1) act as the coordinating agent, in the Federal government, for environmental education-related activities carried out by other agencies of the Federal government; (2) provide technical assistance to state and local governments developing environmental education components; (3) assess the

* From U.S. House of Representatives Report No. 93-402

development of environmental education as well as conduct rigorous evaluations of environmental education programs; and (4) perform a liaison function between the educational community and environmental groups.

Clearly, in the Committee's opinion, the Office of Environmental Education, hampered by lack of funds, still has much to do.